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ARED

Economic and Social Research for Rural America

News

Agricultural and Rural Economy Division
Economic Research Service
U.S. Department of Agriculture

Fall 1991



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Fall 1991

Economic and Social Research for Rural America

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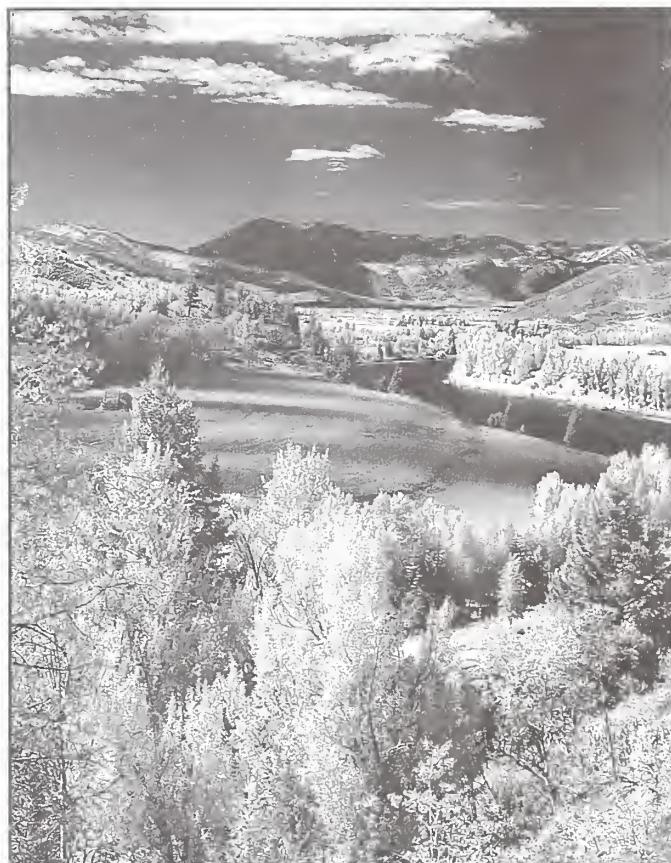
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ARED REFLECTIONS

By Ken Deavers

I always find it surprising, as I review work plans and the accomplishments for branch chiefs and section heads, how diverse the range of ARED subject matter is. Given that, we face a challenge in planning a program of work that is coherent. What we want is a diverse program, with interesting and useful individual pieces of policy relevant research and analysis for individuals and teams to work on, but also one that adds up to more than the sum of the pieces. We try to accomplish that in several ways.



Ken Deavers

Each section head is responsible for articulating a program, with key themes that can guide the development of specific projects and activities by the staff of the section. As a setting for the section heads, there should be a similar statement of program priorities and content by the branch chief—one that does not focus only on the organization (i.e., each section), but seeks to understand the potential for, and encourages integration of the work of the branch. At the division level, Sara, Norm, Dave, and I share a similar responsibility.

ARED's program directions, themes, and priorities are a response to what we learn from analyses (ours and others), what we hear from our various publics, and issues that surface in the USDA public policy arena. This information is filtered through our various disciplinary perspectives. And our actual program also reflects the particular strengths and weaknesses we have in our current staff to respond. For example, there may be no data on which to base sound analyses of some issues, seriously inhibiting our ability to undertake certain work. In other cases we may not have the technical expertise to conduct the needed analyses; this is one way in which we can and should use cooperative research agreements. The best agreements are those that add to the policy-relevant knowledge in the area and also add to our institutional capital—making us more able to continue future work independently. (The cooperative research agreement with Sherman Robinson on CGE modeling is an excellent example). In still other cases

we will face serious problems because of basic weaknesses in the underlying disciplinary theory.

Our program needs to be dynamic, responding to the way the USDA issue agenda changes over time. But that does not mean that there is no continuity to our work. Some areas of work will, in fact, be a relatively permanent part of the program—farm and rural population, farm income and balance sheet, commodity cost of production, etc. Even in these areas we are always trying to improve our concepts, our measurement, our understanding of the forces of change and their significance. Some areas will disappear in one form and resurface in a different way, e.g., division work on rural education was discontinued in the late 1970s, but in a human capital context has become a central concern of division researchers trying to understand the changed competitive position of rural areas that emerged in the 1980s. Still others will be periodic, coinciding with the release of information from the decennial Census or various economic censuses, e.g., the update of the rural typology and the analysis of 1980-90 change.

In all of our research and analysis it is useful to remember our niche in the marketplace for information. Two aspects of the niche strike me as especially important. One is our institutional home in USDA. The Department has a broad legislative mandate extending well beyond the production of the nation's food and fiber. It is mirrored in the breadth of the ERS and ARED programs. As the Department's mandate changes our programs need to change so that our analyses remain policy relevant. Second, we are not advocates for particular policies, nor are we the defenders of particular stake holders in the food and fiber, international trade, and natural resource systems, or rural America. It is our job to describe and explain as fully as possible where the nation is, where we seem to be headed, and the potential consequences for all our citizens of those trends and various policies that contribute to or might mediate those outcomes. Our choice of issues to analyze is defined by the Department's legislative mandates, and our priorities are shaped, in part, by the interests of the current policy officials of the Department.

As we begin a new fiscal year, and you revise your elements and standards, it is a good time for you to think about how your work contributes to the program of the section, branch and division, and how it can best be made accessible to our diverse publics. Whether you are beginning a new multi-year program of work, in the middle, or completing one, ask yourself how your work can best contribute to public understanding and dialogue on the issues. Make sure that the central questions you are asking are clear, and that you understand the connections between your work and the public policy issues facing the Department.

These are all challenging tasks. I think that we have an excellent record in meeting the challenge. But we always need to strive to be better.

ARED Researchers at the American Agricultural Economics Association Meetings

ARED researchers contributed to the 1991 Annual Meetings of the American Agricultural Economics Association held at Kansas State University in Manhattan, Kansas by leading sessions, giving papers and presenting posters.

John Jinkins (FSFA) was the organizer and chair of a symposium entitled "Value Added by Agricultural Production." He also presented a selected paper "Value Added--A New Approach to Measuring the Income Produced by Agriculture." The paper proposes a framework for measuring agricultural value added and explores variations in value added creation among farm types. Results show that crop farms usually generate more value added per dollar of farm income than livestock operations. Grain farms had ratios of value added to farm income almost as great as farms specializing in higher price commodities. Similar results were published in "Net Value Added' Gauges Farming's Contribution to the Economy" by **John Jinkins** and **Mary Ahearn** (FSFA) in *Agricultural Outlook* May 1991. Other presenters in the session included **Greg Hanson** (Pennsylvania State University), formerly of ERS and **Bud Stanton** (Cornell University), whose work was supported under a cooperative agreement with ARED.

Janet Perry (FSFA) participated in an organized symposium on "The Future of Rural America". The four person panel discussed rural employment strategies, quality of life in rural areas, rural poverty and the importance of off-farm income to the farm household. Janet presented a poster co-authored by **Mary Ahearn** entitled "Limited Resource Farms and Household." The poster presented characteristics of the approximately 200,000 farms and households identified as limited resource. In addition Janet presented a selected paper on "An Application of the Probit Model to the Decision to Farm." She used a probit model to test the influence of the expected earnings differential between farm and non-farm employment on the decision to farm. The results showed that young men seek a comparative advantage when deciding on employment.

Douglas Bowers (NEH) moderated a symposium on "The Agricultural Economics Profession Since 1922: Interaction of the Colleges and USDA." The session included talks by

historian **Joel Kunze** on the early years of the profession and **Willard Cochrane** on his appraisal of the past 50 years based on his experience in USDA and in academia. A lively discussion followed during which many members of the audience shared their own experiences in the profession.

Gerald Schluter (NEH) presented "Pitfalls of Value-added Measurement" in an organized symposium on value-added in agriculture and had a poster session, "A Farm Sector Paradox: Can Real Factor Income Increase While the Sector Sheds Factors?" The poster session reviewed the experience of the 1980's when the measured levels of capital stocks, land, borrowed capital, and labor all fell while real gross national product originating in the farm sector rose.

Ted Covey (FDP) presented a paper co-authored with **Dave Bessler** (Texas A&M) entitled "The Role of Futures in Next-Day Price Discovery." The paper showed that information in a commodity's futures price could be used to predict its subsequent spot price on a daily basis. The concept of day-to-day prediction provides a new alternative for farmers in their use of futures markets as well as an additional means for policy-makers to evaluate futures' role in the forward-pricing of cash markets.

Andy Bernat presented the paper "Economic Structure and Income Redistribution: An Input-Output Perspective." The paper showed how an extended input-output model could be used to analyze the way changes in regional output affect the distribution of income. An application of the model to a small resource-based region showed that the distributional impacts of changes in sectoral output vary a great deal across sectors.

Mitchell Morehart (FSFA) presented a poster on "Economic Accounting for Commodity Costs and Returns: A Report of a Conference and Efforts to Standardize Measurement." Morehart was selected to serve on the Taskforce on Standardization of Cost and Return Measurement Methods, initiated by the AAEA Economics Statistics Committee. The first meeting of the task force steering committee was held during the meetings. Morehart also participated in a meeting held with researchers from Texas A&M and FAPRI concerning cooperative projects examining the comparability of panel farm data and survey data.

ARED Publications

Linda Ghelfi Named RCaT Editor

Linda Ghelfi is the new Executive Editor of *Rural Conditions and Trends*. The recently released Summer issue is the first under her editorship. She assumed the position when Sara Mazie became Acting Associate Director for ARED. Linda has been



Linda Ghelfi

involved with *RCaT* since its inception, writing the annual earnings per job section. Linda welcomes suggestions for one-time or periodic articles, particularly from those who would like to write them. If you would like to discuss a possible topic for *RCaT*, please call Linda at (202) 219-0547.

Linda received her bachelor's degree in political science and Spanish from the University of Wisconsin-Eau Claire. She joined ERS shortly after that and completed her master's degree in public affairs (economics and political science) from George Washington University while working for ERS. During 1984-86, she held a field assignment at the University of Wisconsin-Madison. Her research has focused on the economic well-being of rural residents as reflected in poverty rates, per capita and family income, and earnings by industry. She has also investigated metro-nonmetro differences in the cost of living. Currently, Linda and Donald Bellamy (HRIB) are writing a chapter on trends in the income and poverty status of rural Blacks and Hispanics that will appear in an ERS monograph on rural minorities early next year. Linda plans to continue her research on income and the cost of living at about two-thirds her previous pace.

New RDP Editorial Board Chosen

Members of the *RDP* Editorial Board make an invaluable contribution to the quality of the journal: sorting through a wide variety of potential articles to select the best ones, doing in-depth reviews of commissioned articles, and helping the editor make decisions about the direction the journal is taking. Being a board member often requires work above and beyond the call of duty, but it also offers opportunities for professional development.

The Board membership of *RDP* changed this summer. Sue Bentley (FRE) replaced Tom Hady (NEH) as Associate Editor. Hady has shared his expertise and experience with great wit and wisdom. Dave Sears (FDP), Andy Bernat and Paul Swaim of HRI rotated off the board after serving *RDP* with their research and communication skills. Tom Rowley (FDP) became Indicators editor replacing Molly Killian, who is the Executive Editor, and Robert Gibbs (HRI) took over the Book Review duties from outgoing Steve Koenig (FDP). We certainly will miss the contributions to *RDP* of those whose terms of service have expired, while at the same time we welcome new board members John Cromartie (HRI), Karen Hamrick (NEH), Ken Hanson (NEH), and Jim McGlone (FDP).

IN THIS ISSUE RDP

The February-May 1991 issue of *RDP* contains:

"Closing the Gap: Metro-Nonmetro Differences in Long-Term Poverty Among Blacks," by Terry K. Adams and Greg J. Duncan. Severe long-term poverty among rural blacks has fallen more than 40 percent since the early 1970's. Who are the rural black poor? Nearly 60 percent are children, 54 percent are in households headed by women, 65 percent of household heads work at least part-time, nearly all are in the South. Despite improvements, the long-term poverty rate among rural blacks is still more than five times the rural white rate.

"Real Incomes of Rural Black and Hispanic Workers Fell in the 1980's," by Thomas A. Lyson. Economic recovery from the recession of the early 1980's was largely an urban phenomenon, at least through 1987. Rural incomes fell by about 3 percent (in real terms) for white men from 1979-87, about 10 percent for black and Hispanic men. The declines were even greater in the South, where there are concentrations of blacks, and in the rural Southwest, where there are large concentrations of Hispanics.

"Black Farmers: Why Such a Severe and Continuing Decline?" by Calvin Beale. The number of black farmers nationally dropped by 95 percent in the last 30 years. The remaining farms are mostly small and run by older operators. Only conditions that encourage a major infusion of young farmers can reverse the trend. Yet, blacks on farms account for only 2 percent of the rural black population. Efforts to enhance job opportunities for rural blacks (as well as for rural whites) should look outside of farming.

"How the State Community Development Block Grant Program Assists Rural Economies," by John Sidor. Since the early 1980's, States have funneled about \$157 million per year into nonmetro economic development through the federally funded Community Development Block Grant Program. Forget about small-town lust for branch plants. Most CDBG funds went to help small start-up companies with fewer than 25 employees. One problem: many of the jobs created by CDBG funding pay low wages.

"The JOBS Program and Rural Areas," by Leslie A. Whitener. By the end of next year, every State must have a program in place to help welfare recipients become self-supporting. This new attempt at welfare reform seems to have a better chance than earlier attempts, but rural areas may be short-changed because of the difficulty in providing training and employment services to welfare recipients there.

"The Elderly's Income and Rural Development: Some Cautions," by Robert A. Hoppe. A strategy for rural development based on retirement income (enticing the elderly to move in) has limited potential. While many elderly have comfortable incomes, providing services to the local elderly may be a pressing issue for some rural areas. A more basic limitation is that most elderly just don't move.

"Rural Businesses Voice Few Complaints About Their Bankers," by James M. McGlone. Whether through a personal touch in customer dealings or "old boyism," rural bankers satisfy their customers better than urban bankers satisfy theirs. And they achieve that even while charging interest rates that are a little higher than at urban banks.

Rural Indicators: "Southern Black Belt Counties Improve Some, But Continue To Lag Rest of Region," by Donald Bellamy.

Book Reviews: "A Taste of the Country: A Collection of Calvin Beale's Writings," reviewed by John Herbers; "The Retention and Expansion of Existing Businesses: Theory and Practice in Business Visitation Programs," reviewed by Lorin Kusmin; "Transportation Service to Small Rural Communities: Effects of Deregulation," reviewed by Thomas Rowley; "Historically Black Land-Grant Institutions and the Development of Agriculture and Home Economics, 1890-1990," reviewed by John Wennersten.

Short Subjects: "National Commission Assesses Future Rural Development Policy"; "An Arts Festival Can Help Promote Your Community"; "Bonding Schools, Communities, Students"; "Information Exchange Offers Solutions"; and "Adult Literacy in Rural Areas," compiled by Louise Stutzman.

Articles in the next issue of RDP

- Europeans strive to untangle farm and rural policy
- Rural development policy in Canada
- New firms in nonmetro areas show good survival and growth rates
- Skills upgrading an unlikely route to rural prosperity
- "Moonlighting" families--where at least one spouse holds a second job--in rural America
- Assessing the rural development potential of State Enterprise Zones in nonmetro areas

IN THIS ISSUE

RURAL CONDITIONS AND TRENDS

The Summer 1991 issue of **Rural Conditions and Trends** contains the following articles:

OVERVIEW: "National Recovery May Have Begun," by Linda Ghelfi. Many observers believe the recession that started in July 1990 may have ended. The recovery is expected to be moderate after the relatively mild recession. The end of the recession by itself is unlikely to significantly lower unemployment in remote, less developed rural counties with sizable minority populations.

NATIONAL ECONOMIC CONDITIONS: "Mild Recovery Expected," by Karen Hamrick, Beth Mack, and Ralph Monaco. The economy entered a recession last July. Data suggest that the downturn ended in the second quarter of 1991, and a new expansion has begun. Many analysts expect growth to be less robust than is typical for the beginning of expansions.

EMPLOYMENT: "Rural Employment Declines," by Paul Swaim. Rural employment fell by 299,000 between the first quarters of 1990 and 1991, as the national recession affected rural areas. Employment declined more in manufacturing-dependent counties and rural areas of the New England and Middle Atlantic States than in other rural areas.

UNEMPLOYMENT: "Rural Employment Jumps Sharply in First Quarter 1991," by Timothy Parker. Rural unemployment increased substantially between the first quarters of 1990 and 1991. Manufacturing-dependent counties and New England had the largest percentage increases in rural unemployment.

Rural Conditions and Trends is published four times per year. The subscription price is \$14 for 1 year. Send check or money order to ERS-NASS, Box 1608, Rockville, MD 20849-1608. Make check or money order payable to ERS-NASS. You can charge your subscription to VISA or MasterCard. You can also use the toll-free number 1-800-999-6779 to start your subscription.

RCaT SUPPLEMENT FOCUSES ON FINANCIAL MARKETS

Rural Conditions and Trends presents a special report on Financial Institutions and Markets. This annual supplement examines the three most common financial institutions serving rural America--banks, savings and loans, and credit unions--and assesses their health and outlook.

Some of the findings the authors discuss in detail are:

- Most rural banks are healthy enough to absorb weaknesses that would result from a severe economic downturn.
- Fewer S&L's will remain because of tough new Federal standards. Those that do remain will be smaller but stronger because of new capital requirements.
- Rural credit unions are relatively healthy but represent only a small portion of the rural financial industry.
- Credit will be available to qualified rural borrowers, but lenders will more closely scrutinize their creditworthiness.

This *Rural Conditions and Trends* supplement is available from ERS-NASS for \$8.00 (\$10.00 to foreign addresses). To order a copy, call 1-800-999-6779, or write to ERS-NASS, Box 1608, Rockville, MD 20849-1608.

OFFICE OF THE DIRECTOR

Briefings & Miscellaneous

On July 29th and 30th, Molly Killian consulted with Educational Testing Service (ETS) staff members in Princeton, N.J. about the National Assessment of Educational Progress Survey. The survey, which is designed to evaluate reading, writing, math and science skills of a national sample of 4th, 8th, and 12th grade students, is being expanded to include 46 State samples. ETS brought in three consultants to help them evaluate their analysis strategy and production schedule.

FINANCE AND DEVELOPMENT POLICY BRANCH

View from the Branch

By Pat Sullivan

August is supposed to be a time to relax and hide out from the oppressive Washington summer, but it never seems to work out that way. With the close of the fiscal year so near, August has become national paper-pushing month. Between the preparation of detailed plans on fiscal 1992's research and S&O program, individual reports on fiscal 1991's breathtaking accomplishments, and the all important *Newsletter* submissions, an enormous amount of paper gets pushed around during August. When you add all of the desperate attempts to finish up reports in time to squeak through with a September publication date, it's frightening how many trees fall in the support of governmental activities this time of year. To increase, however marginally, the value of these efforts, I'd like to summarize what I've managed to glean from some of the paper that has recently been pushed (or pulled) my way.

While the year isn't over yet, the accomplishments reports for FY-91 signify a great deal of effort on some important issues. During the year, the branch published 17 monographs, 6 chapters in other books or monographs, 22

journal articles (broadly defined), and 4 book reviews; 24 conference papers were completed and 25 presentations were delivered to professional audiences. We also wrote or contributed to 32 staff analyses and 6 legislative reports, and completed 40 papers and draft reports that are currently under review or are awaiting publication.

Accomplishments include the publication of two monographs in the division's "Strategies Report" series--dealing with infrastructure and financial market intervention--with substantial progress made on a third report (being produced jointly with HRI) on business development. The first annual "Special Report on Financial Institutions and Markets" was published as a supplemental *Rural Conditions and Trends* report. And the branch's old standby--the February issue of the *Agricultural Income and Finance Situation and Outlook Report*--underwent a major facelift. Research on interest rates, education finance, agricultural finance, and rural development policy graced the pages of such prestigious periodicals as *Rural Development Perspectives*, the *Journal of Agricultural Economics Research*, the *Journal of Futures Markets*, *Agricultural Outlook*, the *Review of Regional Studies*, the *Agricultural Finance Review*, *Choices*, the *Journal of Applied Gerontology*, *Farmline*, and yes folks, even *Feedstuffs* magazine. With such widespread fame, can fortune be far behind?

Our plans for fiscal 1992 include major efforts on a number of important issues. Congress is currently wrestling with bank reform legislation that could have far reaching effects on the structure of the banking system, and the cost and availability of credit to rural and agricultural borrowers. As Congressional debate continues, the branch will be analyzing the potential effects of various legislative proposals on rural and agricultural banks and bank markets. Problems experienced by the financial services industry have led policymakers to wonder what can be done to avoid still more bailouts for Government Sponsored Enterprises (GSE's)--those quasi-public institutions that help support the housing, student loan, and agricultural credit markets.

To shed some light on this question, the branch plans on continuing an intensive examination of one GSE, the Farm Credit System. Research on the value of government sponsorship, the cost structure of the system, and the efficacy of the system's newly established insurance fund is planned. With continuing interest in free trade agreements and the GATT negotiations, we have begun to receive questions on how the U.S. tax and financial system compares with those of our major trading partners. While we don't have the resources to undertake an extensive international comparison, this year efforts will begin on comparing the U.S. and Canadian tax structure and banking industries.

Within the rural development arena, a special issue of the *Policy Studies Journal*, edited by Norm Reid and Dave Sears, will be coming out soon. Concerned with "rural development policies that work," the volume will include 7 articles on the effectiveness of various approaches to rural development. Norm and Dave are also editing a companion book, expected out in 1992, that will contain additional evaluations of rural development strategies. While these two collections include work from the branch, for the most part they draw upon the work of researchers outside the agency.

To complement the Policy Studies volumes, the branch will continue its own research on selected rural development programs and policies. During the year, the applicability of retirement-based development for rural communities will be examined, together with the rural impacts of military base closings and the long term consequences of unusually low local government spending. Work on the SBA's Small Business Investment Corporation program, multi-community collaboration, and technical development and diffusion programs will also be undertaken.

Unfortunately, not all the paper that comes my way is filled with good news. Over the last few months we've lost several very productive employees--first Merritt Hughes moved to HRI, then Cliff Rossi got an offer he couldn't refuse from the Office of Thrift Supervision, and now Felice Marlbor is moving to Sweden. In addition, a group of conscientious summer interns has returned to school. While we all wish them well in their new pursuits, their absence will be sorely felt.

Research and Analysis

Efforts are currently underway to produce the second annual financial markets supplement to *Rural Conditions and Trends*. The report will provide information on rural bank, S&L, and credit union performance through 1990. Special articles on bank reform and rural business access to credit are also planned.

Publications

The Spring 1991 issue of *The Review of Regional Studies* (Vol. 20, No. 2) includes an article by Pat Sullivan and Bill Herr (SIU-Carbondale) on "The Effects on FmHA Guaranteed Farm Loans on Rural Credit Markets." Based on data extracted from FmHA's computerized master files at the end of fiscal 1988, the authors identified each commercial bank that originated one or more FmHA-

Financing Agriculture In A Changing World Is Focus of Four ARED Studies

"Testing Fisher's Hypothesis for Agriculture" by Ted Covey and Ronald A. Babula (NEH) was published in the February 1991 issue of *Financing Agriculture in a Changing Environment: Macro, Market, Policy and Management Issues*, the proceedings of the Regional Research Committee NC-161. The study measures Fisher's effect (that changes in inflationary expectations result in changes of equivalent magnitude and direction in nominal interest rates) for loans made by commercial banks in three separate financial markets. Short-run responses in farm loan rates differed by region but were similar across loan types. The long-run responses were strikingly similar both by region and by loan type. Longer-term loans were found to be less responsive than shorter-term farm loans to inflationary shocks. One important policy conclusion drawn from the study is that for farm investment, inflationary shocks have real consequences--money matters.

"Characteristics of High Performance Agricultural Banks in the 1980's" by George Wallace and Douglas Duncan was published in the same Proceedings. The authors found that in spite of the financial problems experienced by the agricultural sector during the mid-1980's, 217 banks simultaneously maintained a high level of commitment to agricultural lending and earned an above average return on average assets (greater than 1.1 percent).

A comparison of the 217 high-performance banks (HPBs) with 3,081 of their non high-performance counterparts showed that adherence to traditional banking practices appeared to explain most of the difference in performance. HPB's made less risky loans and fewer loans overall. They maintained high levels of liquidity and safety by holding a higher proportion of their assets as securities and kept a higher proportion of their total assets in earning status. HPB's controlled interest expense better by paying a lower average interest rate on deposits. They also were more efficient at controlling noninterest expense. There were no significant deviations between national results and results at the USDA crop reporting regional level. The conclusions of the study imply that local agricultural banks have an expertise in evaluating credit risk which will hold them in good stead as the impacts of deregulation and increased competition continue to spread.

guaranteed farm loans during the year. Using quarterly bank Call Report data from the Federal Reserve Board, the operations of participating and nonparticipating banks were then evaluated. The results of logit and regression analyses indicate that larger agricultural banks, particularly those experiencing problems with their farm loan portfolios, are most likely to participate in the guarantee programs. The analysis also found that use of the guarantee programs by rural banks had a net expansionary effect on the supply of agricultural credit during 1988.

Papers Presented and Meetings Attended

Cliff Rossi presented "Scale and Scope Economies of Rural Savings and Loans" at the annual meetings of the Northeast Agricultural and Resource Economics Association in Durham, NH in June. His paper analyzes the cost structure of rural S&Ls with the purpose of identifying how important ongoing structural changes, such as the thrift industry's contraction and increased specialization in mortgage lending, will affect rural thrift costs.

Upcoming Events

"Financing Rural Water and Sewer Infrastructure to Promote Economic Development," by Cliff Rossi, has been accepted for publication in *Small Town*, a magazine addressing issues facing small communities. The paper discusses strategies for facilitating economic development by rehabilitating or constructing new water and sewer facilities.

Personnel

After 5 years of discontinuous service at ERS, Cliff Rossi has packed up his office one last time and has moved on to a new job as financial economist with the Office of Thrift Supervision (OTS). Cliff's new duties include analyzing alternatives for evaluating financial institution mergers, examining credit risk exposure for the thrift industry, and preparing staff analyses for the OTS.

"Potential Impact of Deposit Insurance Reform on Agricultural Banks" by **Douglas G. Duncan** was presented at the NC-161 Regional Research Committee meeting, "Financing Agriculture in a Changing Environment," held in St. Louis, MO September 23-24. Historical development of Federal Deposit Insurance Corporation terms of operation are detailed and used as a backdrop for discussion of the major reform proposals under consideration in the current Congress. Among the proposals for reform are the assessment of fees against foreign deposits, the assessment of fees against assets less tangible capital, and using the risk-based capital standards as a fee schedule guide for establishing a risk-based deposit insurance system.

"Farm Mortgage Volume: What is Available for Farmer Mac?" was presented by **Steven R. Koenig** at the same Regional Committee meeting. The paper, co-authored by **James Ryan** (FSFA), estimates the volume of agricultural mortgages available for sale into the Farmer Mac secondary market. The study develops historical estimates of the annual volume of farm mortgages originated by different classes of lenders. Then, the Farm Costs and Returns Survey is used to estimate what classes of farmers qualify and how much of the \$80 billion in outstanding farm real estate debt qualifies for resale on the Farmer Mac secondary market. Results suggest that, at least initially, the volume available to the market will be relatively small as large groups of agricultural mortgages will not meet the underwriting standards or are issued by lenders ineligible to sell into the market.

Research and Analysis

Robert Collender, **Cliff Rossi**, **Rich Nehring** (RTD) and **Agapi Somwaru** (DSC) are using parametric and nonparametric techniques to model the operating efficiency and production economies of Farm Credit System (FCS) direct lending associations (Production Credit Associations, Federal Land Credit Associations and Agricultural Credit Associations). The research should provide insight to guide further restructuring of this Government-Sponsored Enterprise to ensure that FCS borrowers receive maximum benefits for each dollar of implicit and explicit Federal subsidy.

Publications

Steve Koenig wrote the credit section of *Provisions of the Food, Agriculture, Conservation, and Trade Act of 1990* (AIB 624), released in June. The section reviews and analyzes Title XVIII, the legislation's agricultural credit provisions. Numerous changes are made by the title to the operation

of farmer programs administered by the Farmers Home Administration, as well as some to the Farm Credit System.

"Reform Poses Risks For Rural Banks" by **Doug Duncan** and **Pat Sullivan** was published in the August issue of *Agricultural Outlook* (AO-177). The recapitalization of the Bank Insurance Fund (BIF) will increase deposit insurance fees for all insured banks. This will potentially result in less available loanable funds. BIF will be insolvent by year's end and failure to recapitalize it would prevent the FDIC from closing insolvent banks. Unfortunately, the current insurance fee system is biased against small banks (which includes most farm banks) since only domestic deposits are assessed. Large banks hold significant quantities of foreign deposits on which no fees are paid. However, if a large bank fails all deposits, including those uninsured foreign deposits, are paid off. This is not the case for small banks.

The May issue of the *American Journal of Agricultural Economics* includes a review of Neil Harl's *The Farm Debt Crisis of the 1980s* by **Jerry Stam** and **Robert Collender**.

Papers Presented and Meetings Attended

Robert Collender presented "Economic Efficiency of FCS Associations," co-authored with **Rich Nehring** (RTD) and **Agapi Somwaru** (DSC), at the Western Agricultural Economics Association meetings in Portland, OR on July 7-10. Results indicate many FCS associations are efficient given the short-run limitations on fixed investment and bad loans. However, as bad loans are written off and fixed inputs reallocated, most associations can improve efficiency.

Briefings and Miscellaneous

Representatives from the General Accounting Office's General Governments Division met with **Jerry Stam**, **George Wallace**, and **Steve Koenig** to discuss agricultural lending in preparation for a report on agricultural and rural finance mandated by the 1990 Farm Bill. Some of the issues covered include agricultural loan pricing practices of commercial banks, the Farm Credit System (FCS), and life insurance companies; financial performance of the FCS; charter and role of the FCS; management effectiveness of the FCS; ability of the FCS to repay financial assistance; and regulatory effectiveness of the Farm Credit Administration. The GAO report is due to Congress during autumn of 1992.

Robert Collender gave a talk to a visiting delegation of Polish agricultural economists on "Agricultural Lending in a Market Economy" on May 20. The talk focused on the benefits of designing efficient financial institutions rather than on financial institutions as a mechanism for subsidizing agriculture or encouraging technological change.

Bob also held a seminar on "Economic Efficiency of FCS Associations" at the Farm Credit Administration, in McLean, VA. on September 9.

Upcoming Events

Robert Collender will present a paper, "Production Economies and Inefficiencies at a GSE: The Case of the Farm Credit System" (coauthored with Cliff Rossi) at the Financial Management Association Meetings in Chicago, October 9-12. This paper will focus on the relative magnitude of production economies and inefficiencies at FCS associations.

Personnel Actions

Mark Adams worked as a summer intern in the Agricultural Finance Section from July through September. Mark is a senior in the Department of Finance at The Utah State University. While at ERS, he assisted with the development of an ERS statistical bulletin on the operations of the Cooperative Farm Credit System.

Merritt Hughes has moved to the Rural Industry Section, Human Resources and Industry Branch.

Government and Development Policy Section

Research and Analysis

Anicca Jansen visited three sites--Custer County, NE, Gratiot County, MI, and southern Alberta, Canada--where there are multi-community collaboration efforts as part of a study undertaken by the North Central Regional Center for Rural Development at Iowa State University. Other researchers making the site visits were Bev Cigler (Penn State), Vern Ryan (Iowa State), and Jack Stabler (University of Saskatchewan). A description of the sites

and their collaborative efforts, along with an assessment of the viability of this approach to rural development, will be presented by the research team at a conference, "Multi-Community Collaboration: An Evolving Rural Revitalization Strategy" to be held in Chicago, November 4-6, 1991.

Tom Rowley and Shirley Porterfield (HRI) have written a chapter on telecommunications and rural development which is scheduled to appear in a forthcoming book entitled *Economic Adaptation: Alternatives for Nonmetropolitan Areas*.

Dave Sears and Norm Reid (OD) are editing two volumes of papers on rural development strategies. More than twenty papers will appear in these two volumes, covering a variety of strategies including loans to businesses, university-based research parks, recruiting prisons, and formation of worker cooperatives. One group of these articles will appear in a special issue of *Policy Studies Journal*, to be released in late 1991. The remainder will appear in a book, to be published in 1992. This entire project is being carried out under the auspices of the Policy Studies Organization, and publication costs are underwritten by a Ford Foundation grant.

Rick Reeder began analyzing the 1987 Census of Governments data for a paper he submitted for the January 1992 meetings of the Transportation Research Board in Washington D.C. The paper examines rural fiscal conditions and implications for proposals to increase the State and local government share of funding for Federal highway projects.

Tom Rowley and Peter Stenberg are currently studying the effects of past military facility closures in rural areas. The study covers base closures implemented since the early 1960s, and examines a wide range of socio-economic indicators. The study, when completed, should prove useful to policymakers facing future losses of major employers in rural communities.

Publications

Through a cooperative agreement with ARED, Barry Ryan (University of Minnesota) produced *Assessment of Wastewater Treatment Facilities in Small Communities*, ERS Staff Report No. 9140. The report examines the condition of wastewater treatment facilities in communities of 10,000 persons or fewer. Capital spending requirements for these systems in 1988 are estimated at \$13.7 billion and are

expected to grow by \$4.4 billion over the next 20 years. Tom Rowley provided overall guidance for this research.

Under an ERS cooperative agreement with Kansas State University, Virginia Tech, University of Georgia, and University of Vermont, Jan Flora (Virginia Tech) and a team of several other researchers have been conducting research on self-development as an approach to rural development. In brief, self-development occurs when rural communities rely on their own financial and organizational resources to initiate projects generating local jobs or income. In April, ERS published a volume entitled *From the Grassroots: Profiles of 103 Rural Self-Development Projects*, Staff Report No. 9123; the bulk of the report presents one-page descriptions of each of the identified projects, including a contact person and phone number for most of the projects. Over the next few months, ERS expects to publish two more reports emanating from this study -- one providing an in-depth look at eight of the 103 projects, and one laying out the study's key findings. Dave Sears has provided overall direction to the research team over the past three years.

In September 1990, John Redman participated in a set of four debates before the Oregon State Legislature's Joint Legislative Committee on Trade and Economic Development. Each of the four debates dealt with a particular aspect of rural development policy in the state of Oregon. Recently, the Rural Policy Research Group, in Oregon published the transcripts of these debates; the publication is *Rural Policy: The Oregon Debate 1990*. John's paper, entitled "Oregon Should Not Adopt a Separate and Distinct Rural Policy," is included in this volume. Most of the debate issues, including the one that John discussed, although focused on Oregon, are of interest and relevance to setting policy in many other rural areas.

Tom Rowley wrote the chapter on the Rural Development Act of 1990 in *Provisions of the Food, Agriculture, Conservation, and Trade Act of 1990*, AIB-624. The Act provides a basis for improved coordination of USDA's rural development effort, by consolidating programs in a newly created Rural Development Administration (RDA). The RDA will administer Farmers Home Administration Community and Business Programs and such other USDA rural development programs as the Secretary deems necessary. Programs to improve infrastructure (including telecommunications) and enhance human resources are also mandated in the Act, along with programs to expand data collection on rural areas.

The Act also provides for more significant participation at the state and local level through two newly established pilot

programs. These experimental programs will each run for five years. The Rural Investment Partnership program will create revolving loan funds in five pilot states. These funds are to be used to leverage private and public funds to invest in or guarantee loans to local rural businesses. State Rural Economic Development Review Panels are also established in five pilot states to assess, review, and prioritize requests for USDA rural development funds. To be eligible for funding, projects must be consistent with locally-generated, long-range development plans. Actual implementation of the provisions in the RDA will depend on their being funded through the FY 92 appropriations process now going on.

Papers Presented and Meetings Attended

Peter Stenberg presented a paper entitled "The Effect of Higher Education on the Electrical Machinery Industry" at the Mid-Continent Regional Science Association Meetings in Chicago, June 1991. Peter statistically tested the hypothesis that universities contribute to the growth of productivity within their regions' electrical machinery industry. Universities contribute by means of their education and research programs. The evidence presented suggests that an electrical machinery firm located near a higher education institution has a comparative advantage over firms not so located.

Anicca Jansen presented a paper, "Does Decentralization Control Local Government Spending: A Test of the Leviathan Hypothesis?" at the Association of Collegiate Schools of Planning Association of European Schools of Planning International Congress, July 8-12, 1991, in Oxford, UK. This paper drew heavily upon Anicca's recently completed doctoral dissertation.

On July 12, the Idaho State Rural Development Council met in Boise. Dave Sears made a presentation on the key choices that a body like the state Council must make when organizing itself for rural development. This presentation was based largely upon the paper (not yet published) that Dave recently co-authored on designing successful state rural development strategies. As hoped, the issues raised stimulated some lively discussion within the Council.

Rick Reeder attended the American Political Science Association meetings in Washington D.C. on August 29, where he presented a paper on rural enterprise zones. The paper was part of a panel on "Rural Development Strategies That Work" organized and moderated by Dave Sears. Other papers in this session dealt with business incubators and technical assistance to business.

John Redman attended a conference, cosponsored by the National Governors' Association (NGA) and the National Institute of Standards and Technology, for State officials working in the area of manufacturing technology diffusion and modernization. Results of an NGA survey on manufacturing extension programs were announced: at present some 26 States have put some form of an industrial extension program in place. Many of these are very comprehensive, both geographically and in terms of the industries they serve. A majority were started in the last two to three years. Approximately 30 State officials discussed various aspects of their programs in general or breakout sessions. One clear message emerging from the presentations was that the great majority of small and medium-sized manufacturing firms in many sectors important to State rural economies can greatly increase worker productivity and profitability through application of better planning techniques and incorporation of more modern, but proven and widely available, manufacturing technology.

On September 19-20, **Tom Rowley** attended a conference on Telecommunications and Rural Economic Development in Dallas, TX. The conference, co-sponsored by the National Council for Urban Economic Development, the Economic Development Administration, and GTE Telephone Operations, was aimed at helping local development officials improve their communities' competitiveness.

On September 25-26, **Dave Sears**, **Tom Rowley**, and **Norm Reid** (OD) hosted the last in a series of mini-conferences on "The Foundations of Rural Development Policy." This meeting focused on methodologies for evaluating rural development strategies. Papers on I-O analysis, CGE models, and case studies were commissioned and presented. These papers, along with those from prior sessions, will be combined into a book edited by the threesome along with **Mervin Yetley** (House Agriculture Committee) and **Glenn Nelson** (University of Michigan).

Briefings and Miscellaneous

John Redman is currently working on a study of the key policy issues faced by the rural textile and apparel industries and the public sector policymakers who work with them. In order to more firmly ground himself in these policy issues, John is attending monthly meetings of the Textile Roundtable.

Tom Rowley has been invited to attend the monthly meetings of Organizations Concerned About Rural Education (OCRE). OCRE's purpose is to explore ways in which its membership (Federal agencies and non-profit organizations) "can mount comprehensive and cohesive policies and programs to address the needs of rural education, especially as it relates to a broader program for improved rural economic development...." The group also provides a forum for discussion of issues related to rural education and economic development.

On July 8-10, the Washington State Rural Development Council met in Wenatchee. The purpose of the meeting was to continue progress on the development of a strategy for the Council. Good progress was made on the specification of the rural development needs of Washington localities and the resources available to address such needs. **Dave Sears** attended the meeting in his role as Monitor for the Washington State Council. Sears also attended an earlier Council meeting in May.

Dave Sears is serving as Vice Chair for the Outcome Monitoring Team of the Presidential Initiative on Rural Development. Over the summer, the Team conducted an evaluation of the eight pilot state effort; a report on the progress-to-date will be issued in the fall. Dave has played a major role in the design and implementation of this evaluation.

Personnel Actions

Betsy Bury spent the summer as a social science analyst in the Section. She worked on a project on textiles and apparel, and on a project on military base closings in rural areas. In September, Betsy returned to Berkeley, where she will be completing her master's program in city and regional planning at the University of California; she is focusing on economic development planning. Betsy has a bachelor's degree in anthropology and psychology from Dartmouth College. She has experience in anthropological field work and teaching, and has worked overseas in Micronesia and Liberia. Brought up in New England, Betsy enjoys bicycling, bridge and phrenology. During the summer, she lived with three roommates and four dogs in Alexandria, VA.

Jennifer Brockett spent the summer as an intern with the Section. She worked on projects on military base closures in rural areas and alternative measures of economic development. She attends Occidental College in Los Angeles where she is a sophomore in the fall. Jennifer is

studying economics and in her spare time enjoys working on political campaigns.

Anicca Jansen recently completed her doctoral dissertation at Cornell University, and was awarded a Ph.D. in City and Regional Planning, with minors in Agricultural Economics and Public Finance. In August, Anicca completed her two-year Presidential Management Intern program and accepted a permanent position with the Section.

Rural Finance and Tax Section

Research and Analysis

Jim McGlone and **Felice Marlbor** are working on a paper entitled "The Impact of Federal Direct and Guaranteed Loans on Rural Development 1983 - 1989." They are using an econometric model which proxies rural development with job growth. After controlling for local factors such as quality and quantity of labor, access to the national transportation network, and local governmental expenditures, the preliminary results show that Federal loan programs had a small impact on rural economic development. This is not that surprising considering how small a fraction of the total volume of lending the Federal programs represent.

Jim McGlone and **Felice Marlbor** have developed a data base that relates all standard zip codes to FIPS codes. The data base does not include unique, APO/FPO, and post office box zip codes. The data base will be used to collate Small Business Investment Corporation data from the SBA, which has only zip code identifiers, with existing data bases which have FIPS code identifiers.

Jim McGlone is conducting a follow up of his study based on the National Federation of Independent Business's survey of Credit, Banks and Small Businesses. The original study, to be published in *Rural Development Perspectives* under the title "Rural Businesses Voice Few Complaints about their Bankers," found that the banking system served rural businesses at least as well as, if not better than, urban businesses. The current study finds that this result holds for 1983 to 1987.

Jim Mikesell is preparing a paper on specialized lending practices of rural banks, for presentation at the Regional Science Association meetings in November. Specialization is often cited as important for the economic health of small banks, as they are faced with increasing competition from

large banking firms. The advantages attributed to specialization include local banks' superior knowledge of the local economy, and the possibility of lowering costs and of providing a better product. Preliminary results indicate that the presence of large banking firms in rural communities stimulates loan specialization by local banks.

Ron Durst and **Mike Compson** are currently completing a paper entitled "Farming the Tax Code After the 1986 Tax Reform Act." Using the 1987 and 1988 Individual Public Use Tax Files, the analysis estimates the impact of marginal tax rates on the probability of reporting farm losses and on the level of losses reported.

Mike Compson has completed a paper entitled "The Impact of Attitudes on Individual Philanthropic Behavior." The paper is based on his dissertation done at Clark University.

Papers Presented and Meetings Attended

Dan Milkove attended the summer meeting of the Econometrica Society, held at the University of Pennsylvania's Wharton School during late June. Sessions on Economic Theory emphasized a variety of incentive problems and their solutions. The Presidential Address by Peter Diamond discussed a novel approach to reforming health insurance that later received national press. This proposal envisions a model based loosely on the Federal Reserve System, which has 12 District Banks throughout the country in addition to a Board of Governors in DC. The Health Fed would have many more local units, with membership based on geography.

On June 18, **Michael Compson** presented "The Impact of the 1986 Tax Reform Act and the 1983 Social Security Amendments on Farmers," a paper co-authored with **Ron Durst** at the Northeastern Agriculture and Resource Economic Association Conference. The conference was held at the University of New Hampshire.

Personnel

Felice Marlbor resigned from the Rural Finance and Tax Section to accept a position with the Monetary and Exchange Rate Policy Department of the Swedish Central Bank in Stockholm.

NATIONAL ECONOMY AND HISTORY BRANCH

View from the Branch

By Tom Hady

Last issue, I discussed the origins of NEH's economics work, five years ago, and some of the progress we have made. My parting comment was "That's good progress, but there's room for as much more in the next five years." Taking those next five years one at a time, this is a good opportunity to talk about a few highlights of our plans for next year.

While good-news/bad-news jokes are stale, I can't resist using the model for one important activity. The good news is that we will be able to update the input/output data that serves as the foundation of our CGE models and a good part of our other work at the aggregative-but-less-than-national-economy level. The bad news is that the update will be from 1977 to 1982. Just this summer, the U.S. Department of Commerce finally released the 1982 input/output (I/O) table, and we will be using it to update a variety of models and to study structural change in the food and fiber system. (Incidentally, the 1982 date is not quite as bad as it sounds. We often base models on more recent years--we currently use 1986 for most CGE work--but the underlying description of production technology is necessarily based on the most recent I/O table.)

We're also pushing ahead on the macroeconomic situation and outlook. **Ralph Monaco** is back from his year on the senior Council of Economic Advisers staff, with a bunch of new ideas on how to improve both the models and the data delivery systems in the macroeconomics section. One priority is to improve the coordination with the international outlook work in ATAD. Another is to revamp our internal data system. ERS changed suppliers of macroeconomics forecasts this year, from WEFA to DRI. While we use DRI's forecasts only to compare with our own, DRI will be the new source of compiled data for our DARTS data system, so we're taking the opportunity to update the whole system while we make the changeover.

I didn't talk about the history work in the last issue, because my direct association with it went back less than five years. One of the things that has particularly impressed me about that group, though, is the number of questions they field from USDA officials and others. Back in 1963, they completed *Century of Service*, a history of USDA's first hundred years, which has the answers to a lot of those questions. Now, they're nearly done with the

sequel, covering the next 25 years. Next, they can turn their attention to studies that might provide more specific help with particular problems and programs. Rural development and US/EC agricultural trade relations are two early targets.

I mentioned that **Ralph Monaco** was back from the Council of Economic Advisers. I should also point with pride to the fact that he was replaced by **John Kitchen**. Apparently CEA likes the quality of macroeconomics we practice in ERS.

Agriculture and Rural History Section

Papers Presented & Meetings Attended

Anne Effland and **William Effland** (CDM Federal Programs Corporation) presented a paper entitled "Soil Geomorphology Studies in the U.S. Soil Survey Program" at the Symposium on the History of Agriculture and the Environment held at the National Archives in Washington, DC, June 19-22, 1991. The paper traces the development of regional interdisciplinary soil science and geological science research from its early accomplishments in the 1930's, through its full development after 1953, to its current reemergence in the 1990s. This research has aided land use planning and the development of a more precise soil survey classification system. It will be included in the symposium proceedings issue of *Agricultural History*.

Cecil Harvey has attended a number of Departmental meetings on Indian agricultural affairs. In the past four months there has been a concerted effort to network agencies involved in Indian programs to distribute information and data on American Indians from all branches of the U.S. Government. USDA has been especially active in this effort. Cecil has been helping to develop the package of questions on Indians for the next agricultural census. He has also met with other Department representatives on the effects of the 1990 farm bill on Indian agriculture, the Intertribal Agricultural Council survey of Indian farmers, and other subjects.

Personnel

The Section welcomed **Ross Buntrock** as a summer employee this year. Ross, a history and political science major at South Dakota State University, completed a computer index of one of the Section's major files. This index will give Section employees the ability to quickly find significant reports according to a variety of search criteria.

Macroeconomics Section

Research and Analysis

Paul Sundell is currently developing an econometric model for short-term agricultural lending rates at agricultural banks. The paper models short-term agricultural bank loan rates as a function of the bank's average and marginal costs of funds and variables related to default risk in agricultural lending and the willingness of banks to bear this default risk. The paper will be available in a staff paper shortly.

Publications

John Kitchen and **Elizabeth Mack's** staff paper, "Macroeconomic Shocks: Effects on the General Economy, Agricultural Prices, and Rural Unemployment" (AGES 9143) was released in early August. The paper provides empirical estimates of the impacts of monetary and fiscal policy changes on the overall economy, agricultural prices and rural unemployment. In addition, it shows how shocks to agricultural prices can affect the general economy.

John also co-authored a staff report with **David Orden** (VPI&SU) entitled "Effects of Fiscal Policy on Agriculture and the Rural Economy," which reviews the recent theoretical and empirical work concerning the effects of fiscal policy on the economy. The paper also shows that fiscal policy is less important than monetary policy (and commodity specific variables) in determining commodity prices.

Karen Hamrick's staff report "Macroeconomic Impacts on Nonmetro Unemployment: Preliminary Research," (AGES 9141) was released in August. The report attempts to isolate how rural unemployment rates are more sensitive to certain macroeconomic effects--changes in the exchange rate, interest rate, and inflation--than are urban areas. The report also explores regional and county type differences in terms of the macroeconomic impacts on the rural unemployment rate.

Mark Denbaly and **Harry Vroomen's** (ERS, RTD) staff report "Elasticities of Fertilizer Demands for Corn in the Short and the Long Run: A Cointegrated and Error-Correcting System," (AGES 9137) was released in August. In the paper Mark and Harry apply relatively new econometric techniques to assess fertilizer demands for corn.

Paul Sundell and **Mark Denbaly** completed a paper entitled "Modeling Treasury Bond Yields: An Efficient Markets

Approach" which will be published as a staff report. An econometric model for long-term T-bonds was developed and estimated. In the model, T-bond yields are allowed to change because of expected changes in term premiums and unexpected changes in expected short-term interest rates caused by economic news. The model found that unexpected changes in real and nominal money market rates, as well real output shocks and changes in real foreign bond yields, generated changes in U.S. real interest rates. Given the important role of Treasury bond yields in determining other long-term interest rates including agricultural mortgage rates, the paper is useful in many interest rate forecasting projects.

Papers Presented & Meetings Attended

In June, **Ralph Monaco** presented a paper, "Recent Macroeconomic Developments and Their Impact on Agriculture," to the Northeastern Agricultural and Resource Economics Association Meeting in Durham, New Hampshire.

Ralph co-authored a paper "Measuring the Extent of Judgement in Macroeconometric Models," with former Macroeconomics Section member **James Malley** (now at the University of Stirling in Scotland). The paper was presented at the International Symposium on Economic Modelling at the University of London in July.

Ralph also presented a paper entitled "Developing and Effective Forecasting Program: An Economic Approach" at the Fourth Annual Federal Forecasters Conference in September.

Mark Denbaly presented "Dynamics of Relative Commodity Spot Prices: An Application to the Wheat Market" and discussed "Further Evidence of Commodity Price Dynamics" by **Ted Jaditz**, BLS, at the Western Economic Association meetings, July 1-3, 1991. In his paper, Mark defines long-run equilibrium as a steady state and constructs a dynamic model that accounts for the causes of short-run deviations of relative commodity prices. Applying the model to relative (to non-food consumer price index) wheat prices, he finds that the real exchange rate, real interest rates, foreign and domestic real incomes, and stocks played a significant role in determining the price dynamics during 1977.4 - 1989.4. Specifically, the magnitudes of the disequilibria and the speed of adjustment are estimated, showing that sixty percent of deviations from equilibrium in any quarter was incorporated into the growth rate of relative wheat price in the following two quarters.

Karen Hamrick served as a member of the planning committee for the Fourth Annual Federal Forecasters Conference, held on September 12 at the USDA South

Building. ERS was a co-sponsoring agency. A record 235 participants registered for the conference, representing over 40 agencies. For a copy of the Forecasters Directory (a few copies are left) or for information on the conference proceedings, contact Karen Hamrick, (202) 219-0782.

Personnel

Elizabeth Mack left the Macroeconomics Section in early August to pursue an MBA at the College of William and Mary. The Section wishes her the best of luck in her new endeavors.

Ralph Monaco returned from the Council of Economic Advisers in mid-June, where he was the Senior Staff Economist for Macroeconomics and Forecasting.

John Kitchen is on detail for a year at the Council of Economic Advisers as the Senior Staff Economist for Macroeconomics and Forecasting.

National Aggregate Analysis Section

U.S. Employment Effects On Metro and Nonmetro Distressed Workers

Ron Babula has explored this issue by applying vector autoregression (VAR) techniques to quarterly data on U.S. employment and the metro and nonmetro levels of five groups of distressed workers:

- Unemployed workers
- Discouraged workers--individuals no longer seeking work
- Involuntary part-time workers--part time workers wishing to work full time
- Nonemployed workers--a sum of the discouraged workers plus half of the involuntary part time group
- Adjusted unemployed workers--a sum of nonemployed workers plus unemployed workers.

Metro and nonmetro distressed workers responded similarly to a rise in employment. In percentage terms, however, the distressed worker group response patterns have been historically stronger and more enduring in metro than in nonmetro areas.

Ron studied how metro and nonmetro levels of distressed workers have responded to employment changes over time. The historical average response patterns generated by the model are useful in characterizing what may happen to these metro and nonmetro distressed workers during an economic recovery. Of course these insights are most valid when specific current conditions do not differ from the long run average patterns captured by the VAR model results.

This work has already resulted in three scheduled articles and two scheduled presentations. The first article will appear in the September 1991 issue of *Agricultural Outlook*. This article shows how metro and nonmetro levels of unemployed, discouraged and nonemployed workers have declined when U.S. employment has expanded.

The second paper, "Dynamic Interactions Among U.S. Employment and Selected Unemployment Measures: An Urban-Rural Comparison," will be presented at, and published in the conference proceedings of, the 1991 Annual Meetings of the Southeast Institute of Management Sciences at Myrtle Beach, S.C. on October 3-4.

The third paper, "Using Dynamic Interactions to Aid Forecasts: The Case of Selected Urban/Rural Employment Measures," was presented at, and will be published in the conference proceedings of, the 1991 Federal Forecasters' Conference in Washington, DC on September 12. More encompassing than the previous two papers, this article reports the results from five VAR models which demonstrate how a one percent rise in U.S. employment dynamically influences the metro and nonmetro levels of all five groups of distressed workers. In addition, the paper demonstrates how one may use these non-forecast dynamics to guide the bounds, and evaluate the reasonableness of competing structural model forecasts of these metro and nonmetro distressed worker groups.

The Factor Intensity Of U.S. Agricultural Trade Is the Subject of Three New Studies

Chinkook Lee's *AER* article entitled "The Factor Intensity of U.S. Agricultural Trade" written with **Darryl Wills** drew many requests for special applications of the I/O-based analytical technique and data which he used in that article. **Chin** responded to these requests with a series of studies. **Chin and Darryl's** *Agricultural Outlook* article, "U.S. Has A Competitive Edge," examines whether the combination of U.S. agricultural exports being land intensive and the United States having abundant cropland is evidence that the United States has a competitive advantage in producing and exporting certain crops.

With Gerald Schluter, Chin did a note, "Fertilizer Intensity of U.S. Agriculture" for *World Agriculture* exploring whether U.S. agricultural exports are more fertilizer intensive (use more fertilizer per dollar of output) than U.S. agricultural imports and whether this intensity has been growing or declining. Exports are more fertilizer intensive but the intensity has been decreasing.

And with Harold Taylor (RTD), Chin did an *Agricultural Outlook* article, "Agricultural Products Expand Fertilizer Trade" exploring the significance of exported agricultural production as a source of demand for fertilizer. Considering this indirect demand for fertilizer makes the United States a larger net exporter of phosphorous products, change from a net importer to a net exporter of nitrogen products, and lessens the degree that the United States is a net importer of potash.

Publications

Ronald A. Babula, David A. Bessler, and Gerald E. Schluter published an article, "Corn/Broiler Price Transmissions and Structural Change Since the 1950's" in the May 1991 issue of *Agribusiness: An International Journal*. The article reports the results of a study using a monthly vector autoregression model of corn, farm broiler, and retail broiler prices for two periods: 1956:1-1968:12 (early period) and 1973:1-1985:11 (recent period). The authors found statistically significant evidence that the way corn price increases elicit changes in the broiler price has changed since the 1950's. Corn price increases are now more likely to be passed on to broiler consumers, and more immediately. Corn price has become a more important broiler price determinant. The models of the two periods are significantly different, suggesting a structural change in the corn/broiler price transmission system. Further analysis suggests most of this change occurred in the model's retail price component.

Research and Analysis

Art Wiese has completed work on a paper, "A Model of Competition for Land between Rural and Urban Uses". The work, which results from his dissertation, demonstrates the importance of the price elasticity of demand facing agricultural producers as a determinant of land use change between the residential and agricultural sectors. The rate of rural to urban land use change in the food and feed grains sectors is greater than the rate of change in the dairy, horticultural, and vegetable sectors.

Arthur has also constructed a comprehensive regional database of consumer prices and quantities for food and energy items over the period 1980-1988 using BLS data. Regional price-quantity comparisons of food and energy items reveal significant variations across regions. For example, consumer retail beef prices throughout the eighties have been consistently greater in the south relative to the east, midwest and western regions. Corresponding beef consumption has been less in the south as compared with the east, midwest and west.

Using this data, a system of demand equations (the Rotterdam Model) for food and energy items in the U.S. has been estimated. The results give statistically significant income and compensated own-price elasticities of demand. Typically, red meats as well as fresh fruits and vegetables are more price elastic than poultry and dairy products. Utilities and gasoline are seen to be very price inelastic. These results will contribute to the CGE modeling efforts of the Section.

Papers Presented and Meetings Attended

Gerald Schluter, participated in an "IMPLAN Workshop," May 20-22, 1991 at the Earl Brown Center, University of Minnesota. IMPLAN, a databank and software package developed by the U.S. Forest Service to construct county or groups of counties level input-output models, and now housed at the University of Minnesota, has become popular with universities as an inexpensive model for doing small area impact analyses. These university-based users organized the workshop to both discuss experiences using IMPLAN and to explore extensions of I/O analysis. Among extensions explored (and presenters of the discussions) were Social Accounting Matrices (Sherman Robinson, U. of California-Berkeley), Interregional Models (Andy Bernat - Human Resources and Industry Branch, Dave Holland - Washington State reporting on NEH cooperative agreement work, and Bruce Weber- Oregon State) and Computable General Equilibrium Models (Gerald Schluter, Maureen Kilkenny - Pennsylvania State, and George Goldman - U. of California-Berkeley).

Chinkook Lee presented a paper, "Recent Developments in the Construction of Input-Output Tables with Use and Make Matrices: An Application to U.S. Agriculture" at the annual meetings of the Canadian Agricultural Economics and Farm Management Society, August 28-31, 1991, in Fredericton, New Brunswick. The paper explores conceptual and empirical issues involved in accounting for secondary production in an input-output table. Secondary production is the production of goods and services other than the goods and services whose production defines a

particular sector. Examples from the agricultural sectors of the 1977 United States table illustrated conceptual points.

Chinkook Lee presented a paper, "An Analysis of North Korea's Economic Development with Special Reference to Agriculture" at the International Association of Agricultural Economics, August 23-31 in Tokyo.

Ken Hanson presented a paper, "Alternative Agricultural Production Systems in the USDA/ERS CGE Model" at the Fifth IASA Task Force on Applied General Equilibrium Modeling in Laxenburg, Austria August 27-29. Hanson explored the sensitivity of CGE modeling results to assumptions about the underlying production system representing agriculture. He finds no clearly superior method of specification but finds advantages and disadvantages for each specification which CGE modelers could benefit from knowing.

Briefings and Miscellaneous

Bill Edmondson visited the campuses of the Universities of Arkansas at Pine Bluff and Kentucky State in Frankfort, Kentucky, May 30-31. The visit was in conjunction with introductory seminars conducted in the use of the IMPLAN modelling system at the 1890 land grant institutions. The seminars were organized by Drs. Eric Siverts and Aurelia Harris of the Forest Service, and Bill helped them conduct the seminars. A major reason for Bill's attendance was to get a feel for the amount of interest among the 1890 colleges for using input-output and related models and to explore the opportunities for ARED'S program for expanding the pool of minorities and women working in our field. The meetings were a success and we expect to participate in an extended IMPLAN training session being planned for late November in Nashville.

Farm Sector Financial Analysis Branch

View From The Branch

By James Johnson

In May, the Branch staff was realigned to provide a greater focus on work related to the financial well-being of farm operator households and to integrate the Branch's economic indicator forecast and situation and outlook reporting responsibilities. A new section, Economic Indicators Forecasts, was created to house the Branch income and balance sheet forecast modeling responsibilities and the Agricultural Income and Finance Situation and Outlook Report. This section will be responsible for developing the income forecasts that are updated and published each quarter in Agricultural Outlook as well as in our own reports. Another less visible but equally important role of the section is to provide seasonally adjusted forecasts each month to the Bureau of Economic Analysis and the Council of Economic Advisors for incorporation into national income and product measures produced by these agencies. A large part of this responsibility is interpretative, helping analysts from the BEA and CEA to understand why agricultural output and income is (or will be) changing. Finally, the section is also responsible for preparing the agency's baseline forecasts of income and other financial indicators. A major outcome of this activity is to provide feedback on how changes projected for individual commodity subsectors may affect sector-wide income and returns. **Bob McElroy** is leader of the Forecasts Section.

The "old" Economic Indicators Research and Forecasts Section has been recast as the Farm Firm and Household Well-Being Section. The new section title underscores the Branch's commitment to conduct research and staff analysis which provides a perspective about the well-being of people associated with agriculture. The new section, under the leadership of **Mary Ahearn**, has been actively involved the past few months in designing next year's Farm Operator Resource (FOR) version of the Farm Costs and Returns Survey and in completing several papers/posters for presentation at the annual meetings of the American Agricultural Economics Association and the International Association of Agricultural Economists. Next year's FOR will collect data related to farm health and safety as well as a wide variety of demographic data related to the characteristics of the operator and his/her spouse; farm household employment in farm and off-farm jobs; household sources of income and expenses; and household

assets and liabilities. Using these data the Branch will be able to develop a rigorous program of work related to the employment and labor allocation decisions of farm operators as well as provide a more in-depth assessment of the distribution of income and net worth of farm operator households. Papers measuring the role of off-farm income in the size distribution of personal income of farm operator households identifying characteristics of limited resource farms and households, comparing the cost efficiency of part-time and full-time farming, and determining how the expected earnings differential that exists between farm and nonfarm employment influences the decision to farm that were developed for the national and international meetings provide a good start on the new section's program of work.

Other sections of the Branch have been busy since early Spring either in preparing estimates of farm income of the farm balance sheet, and of costs of production. These estimates will be published in the various economic indicators reports. They have also been editing and preparing responses to the 1990 FCRS for use in a variety of farm business/farm household analyses, and in designing and carrying out field work (such as questionnaire pre-tests) related to the 1991 survey. Work with the 1990 survey edit has been especially laborious this year as a result of data collection decisions made a year ago. Last year's survey was designed to accommodate individual data cell refusal or non-response for sensitive income, balance sheet, and other personal information. While this data collection flexibility forced us to think about unique data imputation procedures for each question, we believe the end result is a much improved economic data base for farm businesses and farm households.

The 1990 survey was also designed to facilitate development of farm business income and balance sheet statements that utilized recommendations of an industry-wide farm financial standards task force. We believe that this capability will enhance opportunities to interact with farm lenders, academics, and others interested in developing measures of farm financial performance.

Farm Firm and Household Well-Being

Publications

John Jinkins and Janet Perry used the 1989 Farm Costs and Returns Survey to review the financial performance of specialized fruit and vegetable farms. Their research showed that producers who specialize in fruit and vegetables earn little of their income from other major commodities such as cash grains or livestock. In spite of

cash shortfalls in 1989, the financial situation of specialized fruit and vegetable farms compared favorably with that of other farms. Off-farm earnings were an important supplement to the income of fruit and vegetable households. More information is found in the June 1991 issue of *Agricultural Income and Finance*.

Mary Ahearn and Hisham El-Osta used the 1988 Farm Costs and Returns Survey to compare the joint distribution of wealth and income of farm businesses and households to that of all U.S. households. The study, which appeared in *Agricultural Income and Finance* (June, 1991), showed that wealth of farm business, while it is greater than that of all U.S. households, is both greater and more equally distributed than that of all U.S. households. In contrast to all U.S. households, many more low-income farm households are associated with farms with large wealth positions.

Papers Presented and Meetings Attended

Janet Perry and Mary Ahearn participated in the multidisciplinary workshop on "Strategies and Agendas for the Rural Social Sciences", August 1-4, 1991 held in Kansas City, Missouri. The workshop reported the accomplishments of the Rural Social Science Agricultural Agenda Project. Discussions were presented on the need to match present agricultural efforts with the problems and issues of farms, rural societies, agribusiness and consumers. Sessions were "free-style" and covered topics such as rural employment, development work, database and information systems, technical change, agroethics and research agendas.

Mary Ahearn was an organizer and chairperson of an organized symposium on "International Comparisons of Costs of Production" at the XXI Meetings of the International Association of Agricultural Economists, held in Tokyo, Japan, August 22-29. The symposium was held over the course of 4 days and included presentations from individuals representing more than 25 countries. The participants in the symposium agreed it would be fruitful to continue the collaboration in the future. Mary Ahearn also made a presentation in one of the morning Plenary Sessions in which she discussed Gunter Schmitt's paper on farm households and the transaction costs of farm labor.

In addition, Mary Ahearn presented two posters. The first poster, titled "Income Distribution of U.S. Farmers", was co-authored with Hisham El-Osta. The poster showed that when the size distribution of personal income is examined for U.S. farm operator households, the households within each income quartile break into two distinctive groups based on farm assets. Using data from the 1988 Farm Costs and Returns Survey, the authors reached two basic conclusions:

- Farming is very risky. The return on resources (such as time or physical capital) allocated to farming is highly variable.
- By contrast, the return on resources devoted to off-farm activity yields safer returns.

The second poster, entitled "A Comparison of Cost Efficiency of Part-Time and Full-Time Cash Grain Farming in the U.S.", was co-authored with **Gerald Whittaker** and **Hisham El-Osta**. Based on data from the 1987 Farm Costs and Returns Survey, the poster found no statistical difference in cost efficiency between part-time and full-time cash grain farms.

Hisham El-Osta and **Mary Ahearn** co-authored a paper titled "A Regional Analysis of the Role of Off-farm Income in the Size Distribution of Personal Income." The paper was presented by **Biing Hwan Lin** (ERS/RTD) for the authors at the Western Agricultural Economic Association Annual Meetings in Portland, Oregon, July 8-10. The study utilized the concept of the Gini coefficient to examine the importance of income from off-farm sources to the size distribution of total income by region. Increases in off-farm incomes were generally found to reduce income inequality, especially income from off-farm wage and salary jobs.

Briefings and Miscellaneous

Pre-testing of the Farm Costs and Returns Survey was conducted in July and August. **Janet Perry** pre-tested Farm Operator Resource versions in northeastern Kansas and **Mary Ahearn** pre-tested in central Pennsylvania.

Economic Indicators Forecasts Section

The new section became official May 5, staffed by **Bob McElroy** as Section Leader and **Diane Bertelsen** and **Bob Dubman** in financial forecasting. **Bob Dubman** immediately took over the coordination of the *Agricultural Income and Finance Situation and Outlook* (AFO) report.

His first report came off press the latter part of June. Besides the usual analyses of farm income and the balance sheet, **Bob** managed to light a fire under **ARED** researchers and get six special articles included. Subject matter ranged from farmers' decision making criteria to production costs for several major field crops. This is the most special articles we have ever had; **GOOD JOB, BOB!** **Bob** is requesting **ARED** analysts to keep the AFO in mind when looking for a publication outlet.

REMEMBER

AFO

AS AN OUTLET

FOR PUBLICATIONS

Bob McElroy has spent a good part of the summer on the planning committee for the 1992 Outlook Conference. **Bob** will be delivering the farm income outlook speech at the conference to be held December 3-5. Those of you in rural development should also find something of interest at the Conference which will include a half-day session devoted to current development issues.

Personnel

Diane Bertelsen, who had been with the Branch for five years, left in August to begin a new life as S&O analyst for fruits and nuts in CED. Coming from North Dakota and growing up on a wheat farm, this is going to be quite a change for **Diane**. Too bad--they're sending her to Florida in November to look at orange groves. Do they have an orange grove as part of the Land exhibit at Epcot? Good luck, **Diane**.

Farm Costs and Returns Section

Research and Analysis

Gerald Whittaker has just completed a study of the effect of Government programs on profitability of mid-western cash grain farms. He compared the best practice profit

maximization frontiers with Government programs with the frontier without Government programs. Kernel density estimation of the profit measures showed a marked effect of Government payments on profitability:

- 38% of the sample population had a negative return on equity without participation in the programs
- 16% had a negative return with program participation.

Robert Dismukes has undertaken cooperative research with Dr. Bill Miller and Greg Ashley of the University of Georgia on the characteristics and production costs of US peanut farms.

Michael Salassi has just completed a study of the impact of farm program changes on the locational concentration of U.S. rice production. The impact of changing the rice program from a supply-control-type program to a more market-oriented program was analyzed through the estimation of location quotients and coefficients of localization of rice cash receipts. This study found that since 1960, although the relative locational concentration of rice production has varied considerably across the six major rice-producing states, the overall production concentration of the industry, as a whole, has remained virtually constant.

Publications

Gerald Whittaker and Mitchell Morehart have had an article accepted for publication in the 1991 volume of the *Agricultural Finance Review*. In "Measuring the Effect of Farm Financial Structure on Cost Efficiency," they apply a non-parametric frontier efficiency approach which incorporates the financial structure of each farm. While most farms are not constrained by their financial structure, there is a substantial number which are prevented from optimum cost efficient production by their levels of debt or under-utilization of capital resources.

Robert Dismukes and Paul Westcott (Commodity Economics Division) published a special article in the June *Agricultural Income and Finance Situation and Outlook* on trends in corn, soybean and wheat production costs. Their study, using ERS cost-of-production estimates from 1975-89, found that although nominal per-acre costs have increased, real costs, adjusted for inflation and yields trends, have declined.

Michael Salassi published a special article in the April 1991 issue of the *Rice Situation and Outlook Report* entitled "Planting Flexibility Options for Mississippi River Delta Rice Farms." This article described program provisions of the 1990 farm bill related to flexibility options for planting rice base acreage in 1991. The analysis indicated that rice was generally more profitable to plant on optional flex acres, while cotton and soybeans would compete strongly for planting on normal flex acres for rice farms in the Mississippi River Delta.

Papers Presented and Meetings Attended

Michael Salassi co-authored a poster with Shankar Narayanan (Agriculture Canada), entitled "Comparative Assessment of Competitiveness of Commercial Wheat Farm Operations in Canada and U.S.A., 1985 to 1989," which was presented at the XXI International Conference of Agricultural Economists in Tokyo, Japan in August, 1991.

Briefing and Miscellaneous

Mitchell Morehart pretested questionnaires for the 1991 Farm Costs and Returns Survey in Kansas, during August.

Robert Dismukes pretested 1991 FCRS questionnaires in south Georgia. He and enumerators from Georgia Agricultural Statistics conducted interviews of peanut farmers. He also toured the National Peanut Research Laboratory in Dawson, Georgia and discussed the questionnaire and the upcoming FCRS with researchers there.

Michael Salassi pretested the cotton version of the 1991 Farm Costs and Returns Survey in Mississippi in July, 1991. He discussed the questionnaire with producers in four counties as well as with personnel at the Delta Branch Experiment Station in Stoneville, Mississippi and at the Department of Agricultural Economics, Mississippi State University, in Starkville.

Bill McBride pretested the corn version of the 1991 Farm Costs and Returns Survey in Indiana during July, 1991.

Mir Ali pretested the barley version of the 1991 Farm Costs and Returns Survey in North Dakota during July, 1991. He also visited with analysts at North Dakota State University to review their comments on the questionnaire.

Upcoming Events

The section is busy preparing two important publications to be released this fall. One will contain estimates of U.S. average cost of production for major field crops including the final 1989 numbers, preliminary 1990 estimates and forecasts for 1991. The other is an analysis of the financial conditions of U.S. farm operations which focuses on the most recent Farm Costs and Returns Survey data. This report will reflect recent improvements in questionnaire design and accounting procedures used to derive financial statements that are consistent with recommendations of the Farm Financial Standards Task Force.

Personnel

John Jinkins will be transferring to the Farm Costs and Returns Section in October.

Susan Bentley will be on detail to the Farm Costs and Returns Section from FRE during the upcoming calendar year.

Farm Financial Analysis Section

Farm Sector Balance Sheet Data Base Has Been Constructed

The Farm Financial Analysis Section, with major input from Janusz Kubica and Helen Devlin of DSC, used the data contained in its fall publication *Economic Indicators Of The Farm Sector: National Financial Summary* to develop a consistent data base of the farm sector balance sheet, including operator households, from 1960 to 1989 for the entire U.S. and by State. The data base provides estimates of asset and debt values which are used to analyze the financial performance of the farm sector.

The data base has incorporated numerous revisions to the estimation procedures and changes in the available data so that it is consistent over time. The procedures used in constructing this data series appear in *Major Statistical Series Of The U.S. Department of Agriculture Volume 11: The Balance Sheet*. These data have been published in *Statistical Bulletin* No 826, entitled "Farm Sector Balance Sheet, Including Operator Households, 1960-89: United States And By State." The data base will also serve as a basis for

future issues of *Economic Indicators Of The Farm Sector* and for quarterly estimates of farm balance sheet items.

Papers Presented and Meetings Attended

Kenneth Erickson presented a selected paper "Rates of Return in the Farm and Non-farm Sectors: How Do They Compare?" at the Annual Meetings of the Western Agricultural Economics Association, Portland, Oregon, July 7-9, 1991. This paper uses newly-released data to estimate and compare the rates of return in the farm and non-financial corporate sectors, 1970-87. The analysis showed that relative profitability depends upon numerous factors, including: estimation methods, which "farms" are considered, whether returns from capital gains are included, and the time period chosen.

Farm Income Estimation Section

FIES has completed its revision to the income accounts incorporating data from the Agricultural Economic and Land Ownership Survey (AELOS) conducted as a follow-on to the 1987 Agricultural Census. This follows extensive revisions made a year ago using the 1987 Census of Agriculture and some preliminary indications of AELOS results. AELOS provided much needed data that has not been available for 10 years.

Of particular concern, was the potential for AELOS results to lead to a substantial upward revisions to the value of housing stocks. The value of housing stocks is used in the farm income accounts as the basis from which to impute rent for farm dwellings.

Prior to the AELOS, the 1979 follow-on farm financial survey was the basis for relationships used to estimate building values from total real estate values. Building and land values have not always experienced changes of the same magnitude and even direction over the last 10 years. A forecast of the direction and magnitude of the AELOS revisions was made from data collected on the FCRS. The forecast was too high, resulting in a downward revision to imputed rent to offset some of the upward revision made last year. However, the most recent revisions incorporating the new official real estate values based on AELOS are much smaller than they would have been without the "anticipatory" revisions of last year. In keeping with historic tradition, FIES has provided preliminary income estimates to BEA regarding the farm sector's contribution to BEA's National Income and Product Accounts.

The most important transmissions to BEA included the following:

- In late March, preliminary state cash receipts for incorporation into their individual proprietor's income accounts.
- In mid-June, preliminary U.S. farm income accounts.
- In early July, preliminary States' farm income accounts.
- In mid-August, improved U.S. and States farm income accounts.

The selected farm income statistics will be published in the September issue of *Agricultural Income and Finance: Situation and Outlook* and then in the National Financial Summary (Nov.) and the State Financial Summary (Dec.) issues of *Economic Indicators*.

HUMAN RESOURCES AND INDUSTRY BRANCH

View from the Branch

By David McGranahan

The past decade found the U.S. economy vulnerable in the global marketplace. Many observers have argued that workforce education and skill levels are too low. Rural workers in the U.S. have especially low levels of education and the 1980's were especially unkind to these workers. This coincidence prompted a charge to the Branch to investigate education's potential as a rural development strategy. Linda Ghelfi, Molly Killian, Tim Parker, Paul Swaim, Ruy Teixeira, and I worked on the project. We broke the investigation into several related questions: What is the evidence of a national crisis in workforce education? Were low rural education levels the cause or the consequence of rural economic misfortune in the 1980's? Is there a critical need to improve education and training of rural youth? What are the problems and possibilities for improving education and training in rural areas? Our report, Education and Rural Economic Development: Strategies for the 1990's, is being published this month as an ERS staff report.

Our central conclusion is that education's potential as a rural development strategy is generally quite limited. Local workforce education levels appear to have had little bearing on rural area job growth in either 1969-79 or 1979-86. In the 1980's, rural areas were more apt to be hampered by

their remoteness and small size than by the qualities of their workforces. Moreover, attempts to raise local workforce education levels through improving local schools are likely to be frustrated by the considerable migration that takes place into and out of nonmetro counties, especially by better educated young adults.

Our second conclusion is that, even though the link between local labor forces and local schools is weak, there is a critical need to improve the education and training of rural youth. The potential to enhance the economic opportunities of rural youth is substantial and growing, if not in their home towns. The earnings of less educated workers fell markedly in the 1980's in rural and urban areas alike, increasing the importance of extra years of schooling considerably.

Finally, our findings strengthen the case for shifting the responsibility for funding education away from localities to broader units of government. Rural areas tend to be disadvantaged both by their small schools and school systems, which allow few economies of scale, and by weak tax bases. But the question is more than one of geographic equity between rich and poor areas. To the extent that local investment in rural schools does not generate local growth, community support for education on the part of the local business elite is likely to be weak. Raising taxes to improve schooling may even be seen as inimical to growth. Education has a better payoff for individuals, states, and the nation as a whole, for increases in labor productivity would improve both personal incomes and our international competitiveness.

The report has 4 chapters in addition to an introduction (from which the above has largely been taken). Chapter 2 focuses on the national education issue. Teixeira and Swaim examine the education crisis from both the demand side (job skill requirements are going up) and the supply side (young adults are poorly trained). Research evidence suggests that both are true, but not enough is known about changes in the skill content of jobs to assess how serious the crisis may be. In Chapter 3, McGranahan and Ghelfi report on their research on rural economic problems in the 1980's. They find that the number and average education requirements of jobs rose faster in metro areas in the 1980's than in nonmetro areas, but little evidence that this resulted from low nonmetro education levels. First, even though nonmetro areas had low education in 1970, nonmetro growth in jobs and job education requirements had been faster than metro growth in the 1970's. Second, pay for high education jobs rose considerably in metro areas in the 1980's but little if at all in nonmetro areas. Associated with the greater metro pay differential in the 1980's was a rural brain drain—a net outmigration of the better educated nonmetro workers to metro areas. In both metro and nonmetro areas in the

1980's, pay to young adult workers with high school and less education fell markedly. Education makes a much greater difference in pay now than it did 15 years ago.

In Chapter 4, Killian and Parker report that their research on rural labor market employment growth showed no evidence that, once differences in local industry structure were taken into account, areas with better educated workforces had greater employment gains in either the 1970's or the 1980's. This was true even in the South, where education levels are relatively low.

Given the increasing importance of education individual worker's economic opportunities, the last chapter, by Swaim and Teixeira, examines options for upgrading the skills of the rural workforce. Rural students lack increasingly important cognitive skills, and rural governments and employers often lack the resources to upgrade those skills. Curriculum reform and closer coordination among schools, training programs, and employers could be important steps. If school and training reform is to do more than improve the job opportunities of outmigrants, however, it needs to be part of a comprehensive rural development strategy.

The report is available from ERS-NASS. For more information call ERS-NASS at 1-800-999-6779.

Income and Well-being Section

The Findings of 14 Reports on Rural Education Summarized

Linda Ghelfi presented a "A Synopsis of Recent ERS Rural Education Research" at the Southern Regional Information Exchange Group 53 (SRIG-53) meeting in Atlanta, May 6-8. In 14 ERS reports on rural education published within the last 5 years, Linda found two general concerns--the role of education in rural economic development and rural-urban equity in education financing. Our research on education's role in rural economic development suggests that highly educated workers are a necessary, but not sufficient, condition for high-tech job growth in nonmetro areas. Lack of demand for highly educated workers by nonmetro employers is the more probable reason nonmetro areas stagnated during the 1980's than is a lack of supply of educated workers. Nonmetro areas have perennially lost more highly educated migrants to urban areas than they have received in return. If nonmetro employers can increase demand for highly

educated workers, more highly educated people will stay in or move to nonmetro areas.

Development of high-tech jobs in rural areas would make the reward for increased education more tangible. Currently, rural areas have a higher high school dropout rate than metro areas. If youth look at local employment opportunities as an indicator of the payback for staying in school, higher paid jobs requiring a college education would show them that longer school is worthwhile.

Our research on school financing shows that average expenditures per pupil in nonmetro counties exceed metro expenditures. The higher overall average in per pupil spending in nonmetro areas, however, obscures the fact that in most States there is a greater variation in expenditures in nonmetro than metro areas, with many nonmetro areas falling far below the average in per pupil expenditures.

The research also indicates that with lower property values, rural school districts cannot raise the per pupil amounts from local property taxes that urban school districts can. Some States allow local option sales taxes, but this is not an option that favors rural areas any more than property taxes. Rural shoppers tend to go to metro and large nonmetro centers for many of their purchases in effect helping fund the educational system in these areas when sales tax revenue is used to finance education. Even if rural residents shop locally because they generally have lower incomes than urban residents they spend less and generate less sales tax revenue.

Papers presented and Meetings Attended

In August, Elizabeth Dagata presented a paper entitled "Intergenerational Poverty in Metro and Nonmetro Areas" at the National Annual Institute on Social Work and Human Services in Rural Areas in Nacogdoches, Texas. Using the Panel Study of Income Dynamics data, Elizabeth found that in 1986 the rate of second generation poverty, defined as being poor during three consecutive years during both childhood and adulthood, was higher in nonmetro than metro areas. She also found that nonmetro second generation poverty is almost entirely limited to the South. The adult family structures of the second generation poor in both residence areas (single-female headed families) tended to mirror the structure of their childhood families. Long term receipt of Aid to Families With Dependent Children (AFDC) also was more common among the second generation than the rest of the population, although the nonmetro second generation poor were somewhat less

likely than the metro second generation poor to receive long term AFDC benefits.

At the same meetings, **Bob Hoppe** delivered a speech entitled "The Volatile Farm Poverty Rate: What Does It Mean?" The poverty rate for the farm population is much more variable than the poverty rate for other groups. This variability is caused in part by the volatility of farm income. The farm poverty rate may also be affected by unemployment, which reduces the availability of off-farm work to the farm population. A volatile farm poverty rate has implications for human service workers in rural areas. For example, large swings in the farm poverty rate could mean that the demand for social services, such as financial aid and family counseling, will also be subject to large swings. Accommodating these swings may be difficult for agencies in small, rural areas.

On August 1, **Linda Ghelfi** attended an interagency meeting at the Immigration and Naturalization Service to discuss the implementation of the new visa program for alien entrepreneurs. The program allots 10,000 visas to entrepreneurs (and their spouses and dependent children) who will invest \$1 million and create at least 10 full-time jobs in starting up a new business or expanding an existing business. Rural areas and areas of high unemployment are slotted to receive 3,000 of the visas. Rural is defined as outside metro areas and outside cities of 20,000 or more population in nonmetro areas. High unemployment areas have an unemployment rate at least 150 percent of the national average. The availability of county-level unemployment statistics and the possibility of allowing entrepreneurs who set up in rural or high unemployment areas to invest \$500,000 rather than a million were discussed.

Deborah Tootle attended the Annual Meetings of the Rural Sociological Society in Columbus, Ohio, August 17-22, 1991. There she presented a paper "The well-being of nonmetro American Indians in the 1980's" in a session on "Ethnic Minorities and Rural Poverty". Findings indicate that although American Indians made substantial gains in well-being during the 1960's and 1970's, during the 1980's rural American Indians made little, if any, economic progress. The paper was coauthored by **Jackie Salsgiver**.

Deborah Tootle also participated in a specially organized panel on "Spatial Organization of Inequality in the United States." Papers presented in this panel will appear later this year in *Inequalities in Local Labor Markets*, edited by Joachim Singelmann and Forrest Deseran. The paper **Deborah** presented, "Black concentration and underemployment in Southern labor markets", was from a continuation of her work with **Leann Tigges** (University of

Georgia) on minority concentration and underemployment in rural areas. A related paper, "Underemployment, competitive effects, and the structure of local opportunities: assessing the direct and indirect effects of black population concentration", was presented at the Annual Meetings of the American Sociological Society, August 23-27, 1991 in Cincinnati, Ohio.

Population Studies Section

Papers Presented & Meetings Attended

Carolyn Rogers attended the Interagency Forum on Aging-Related Statistics in Bethesda, MD in July. She continues to participate in the Forum Work Group on the Rural Elderly. Carolyn will be attending the 1991 Symposium on the International Collaborative Effort (ICE) on Measuring the Health and Health Care of the Aging, to be held in September in Rockville, MD.

Paul Frenzen attended the annual meeting of the Rural Sociological Society in Columbus, Ohio in August, and presented a paper on health insurance coverage in metro and nonmetro areas. The paper used data from the March, 1990 Current Population Survey to examine the differences in type of coverage. Although nonmetro residents were less likely to have health insurance, they were more likely to have private coverage obtained outside the workplace, substantially narrowing the difference in the proportion of persons without insurance. Coverage of this kind was most common among nonmetro small firm employees and their families, suggesting that small firms in nonmetro areas were particularly unlikely to offer health insurance benefits.

Personnel

Laarni T. Dacquel, started with ERS in the Population section as a summer intern in June of 1990. After graduating from the University of Maryland at College Park with a B.A. in Sociology she was hired as a Sociologist in the same section. In the Fall she will be pursuing a Masters degree in Demography with a concentration on families at Georgetown University.



Laarni T. Dacquel

Currently, she is working on two ongoing projects. One

of them is with Linda Swanson focusing on rural family transitions. A previous collaboration with her on household and family structure was published in *Rural Conditions and Trends*. The second project, done jointly with Felicia LeClere, is a chapter on black farmers which will be a part of an upcoming Minority Monograph. In addition she will be working on the annual cooperative Census/ERS report on the rural and farm population.

Rural Labor Section

Research and Analysis

Tim Parker presented his observations from a field research trip to rural Kansas at a recent HRIB brown bag lunch seminar. His field study research focused on some of the problems of measuring unemployment in rural agricultural areas. Interviews were conducted with state and local unemployment officials to learn how unemployment at the county level is estimated, and to assess the accuracy of these estimates. One of the most important observations gathered from these interviews is that unemployment rates by themselves are not necessarily a good indicator of the labor market conditions in rural counties. Unemployment, employment change, and earnings per job provide a much more accurate picture of the labor market conditions.

Robert Gibbs is currently engaged in analyzing changes in the occupational structure of rural southern blacks during the 1980s. The combined effects of a slow-growth rural economy and the transformation of the national economy toward services seems to have stalled the historical convergence of black and white male job status. Black women, on the other hand, are faring better, experiencing a continuing shift out of low status service work into sales and administrative support jobs. Final results will be published as a chapter in an upcoming ERS monograph on the status of rural minorities.

Robert Gibbs has continued his research on how the migration from rural areas is caused by and affects labor markets. Robert has submitted a paper entitled "The Information Effects of Origin on Migrants' Job Search Behavior" for publication in the *Review of Regional Studies*. Using a two-stage least squares regression model, Robert found that both the amount of time spent job searching and the wages earned by interregional migrants at the destination are affected by the region of origin. Rural southerners, especially southern blacks, who move to urban and nonsouthern places tend to accept lower paying jobs and spend less time searching for work than other migrants,

after controlling for human capital levels. The results suggest that workers' early labor market environment is important because it affects long-term well being regardless of future residence and job choice.

Publications

Ruy Teixeira's article, co-authored with Lawrence Mishel (Economic Policy Institute) and tentatively entitled "Rural Workforce 2000: Skill Upgrading and the Rural Economy, 1970-2000," will be published in the June/September issue of *Rural Development Perspectives*. Their analysis of trends in skill supply and demand in rural labor markets indicates that skill shortages probably are not a major barrier to rural development.

A second article by Ruy Teixeira and Lawrence Mishel, "The Myth of the Coming Labor Shortage," is appearing in the September issue of *The American Prospect*. They argue that supply-side policies, which enhance U.S. economic competitiveness, have improved schools and job training, need to be complemented by demand-side policies that encourage employers to make fuller use of workers' skills. A report detailing the complete findings from Ruy and Larry's research comparing skill trends in rural and urban areas will be issued by the Economic Policy Institute later this year.

The Review of Economics and Statistics will publish "The Distributional Shape of Unemployment Duration," by Paul Swaim and Michael Podgursky (University of Massachusetts). In this article, Paul and Mike use hazard models to analyze the length of unemployment spells following permanent layoffs. Conclusions concerning the prevalence and causes of long periods of unemployment are shown to be quite robust to alternative distributional assumptions and to provide useful guidance for labor market policy.

A second paper by Paul and Mike, "The Distribution of Economic Losses Among Displaced Workers," is appearing in the Fall issue of *The Journal of Human Resources*. This paper analyzes difficulties associated with using cross-sectional and retrospective data from the Current Population Survey to model individual labor market histories. Paul and Mike show that an earlier study, which failed to adjust for measurement error and sample selection bias, reached invalid conclusions concerning the size of earnings losses following displacement.

Tim Parker and Paul Swaim analyze the impact of the recent recession on rural workers in the September issue of *Agricultural Outlook*. Tim and Paul's article, "Recession Lingers in Rural Labor Markets," shows that rural unemployment is up substantially since mid-1990, but that

rural conditions have not deteriorated as much as in the 1981-2 recession.

Personnel

Ruy Teixeira is on leave from ERS until March, 1992. During this period, Ruy is in residence at the Brookings Institution, where he is writing a book on the problem of low voter turnout in the United States. The book will be published by Brookings in the early Fall of 1992.

Rural Industry Section

Model Assesses Effect of Federal Credit Reform on Rural Economy

Merritt Hughes and Anna Nagurney (University of Massachusetts) have also been hard at work at developing a general financial equilibrium model that can address how Federal proposals for credit reform may affect agriculture and the rural economy.

The technical challenge with this project has been to develop a meaningful analysis of disaggregated financial flows. Two papers from this project have already been accepted for publication. "A Network Model And Algorithm for the Analysis And Estimation of Financial Flow of Funds," will appear in *Computer Science in Economics and Management* (Fall 1991) and "Financial Flow Of Funds Network" will appear in *Networks* (Spring 1992).

Hot off the PC is a third paper, co-authored with Xiong Dong (University of Massachusetts): "Formation And Computation of General Financial Equilibrium" is available from the authors. Results of this research have also been presented at the International Conference for Industrial and Applied Mathematics (July 1991 in Washington D.C.) and at the Society for Economic Dynamics and Control (June 1991 on Capri, Italy), and ORSA-TIMS 31st Joint Meetings (May 1991 in Nashville, TN).

Publications

Merritt Hughes will have a two part article coming out in the November 1991 and February 1992 issues of the *Journal of Regional Science*. The articles develop a model of a regional economy in which financial decisions of sectors

and institutional detail of the financial sector are explicitly recognized.

The November article, "General Equilibrium of a Regional Economy, Part I: An Accounting Framework," describes a general social accounting matrix, wealth matrix and definitional equations linking the two. The February article, "General Equilibrium of a Regional Economy, Part II: Application to Credit Rationing," presents a simple model based on the accounting framework of the first article, showing how regional economies may expand or shrink based on their sectoral financing habits.

FARM AND RURAL ECONOMY BRANCH

View From The Branch

By Tom Carlin

July is usually the month when staff develop research plans for next year. I would like to highlight three or four research products that we expect to become available during FY 1992.

FRE staff, in cooperation with staff in FSFA Branch, have been developing a prototype report on characteristics of the U.S. farm sector using the annual USDA Farm Costs and Returns Survey (FCRS). They have been examining the characteristics of farms with sales of \$40,000 or more using the 1987, 1988, and 1989 FCRS data. The reasons that we have focused on commercial farms in this prototype report have to do primarily with NASS sampling procedures for these particular surveys. We have learned a great deal about using the FCRS for farm structure analysis. Our plan is to launch a new annual report on the characteristics of the U.S. farming sector which will cover all farms and will start with the 1990 FCRS. This new report will become what we call the annual family farm report. The annual report on the status of the family farm is required by Congress.

The 1987 Census of Agriculture data has recently become available on the Census Longitudinal File. The Census Bureau uses this file largely for administrative purposes but it does contain limited data for all farms reporting in each of the periodic agriculture censuses starting with the 1978 Census. The availability of the 1987 data will allow us to examine recent changes that have occurred in the farm sector including firms that have increased or decreased in

size or have entered or exited farming. With the availability of this file, we will be moving closer to offering projections of both farm numbers and the distribution of farms across different size classes and other structural variables.

Branch staff will also develop and publish new information on the basic demographic characteristics and annual average earnings of hired farmworkers. The data is from the Current Population Survey (CPS) earnings microdata file. Preliminary analysis suggests that the CPS data compare very favorably with other benchmarks such as the NASS Quarterly Labor Survey. The new data may be used to monitor month-to-month and year-to-year changes in hired farmworker employment and earnings. This new information will replace some data previously published in the *Agricultural Work Force* which was discontinued in 1987.

FRE will be revising its estimates of total employment and farm-related employment in U.S. counties. The previous estimates were based on data from the County Business Patterns file supplemented by Bureau of Economic Analysis data on farm wage and salary workers and farm proprietors. The primary revision in our procedures will be to add nonfarm proprietors to total employment and to employment in farm input, processing, and marketing sectors. This change will not affect our procedures for estimating total employment in farming. We expect that the inclusion of nonfarm proprietors will have a greater affect on total employment than on farm-related employment. Thus, our estimates of the proportion of nonmetro employment that is farm and farm-related will decline. We will also be incorporating these change into our procedures for identifying agribusiness counties.

ERS Releases American Harvest

ERS has just released a new video tape called the *American Harvest*. The video was produced by Dave Carter, EMS-USDA, with technical guidance provided by Tom Carlin and Sara Mazie. The approximately 30 minute tape takes as its theme the idea that farming in America is not what you think it is. The video investigates "farms" (there is no such thing as a typical farm), "farming and rural America" (farming is not the main activity in most rural areas) and the "farm family" (very much in the mainstream of American life). Viewers meet the folks who own a small, "lifestyle" farm in Virginia, a soybean/hog farmer in Illinois, and a man who grows almonds, grapes, kiwis, and a whole lot more in California. The video would be excellent to use in an introductory course in agriculture at either the college or secondary school level or to show to any group that has limited knowledge about the structure of U.S.

agriculture or the role of farming in rural life. The video can be ordered from ERS-NASS, P.O. Box 1608, Rockville, MD 20849-1608. The price is \$15.00. It can be ordered by calling 1-800-999-6779.

Agricultural and Community Linkages Section

Papers Presented and Meetings Attended

Judith Sommer and Mindy Petrulis attended an IMPLAN (Impact Analysis for Planning) update workshop May 20-22 in St. Paul, MN. Participants discussed issues related to input/output modeling as well as future IMPLAN system development.

Publications

Judith Sommer and Fred Hines published "Diversity in U.S. Agriculture: A New Delineation by Farming Characteristics," AER 646, a study that reveals patterns of agricultural production across the Nation. Cluster analysis is used to group 2,972 counties into 12 multi-county clusters that are relatively homogeneous with respect to three dimensions: farm enterprise, farm resources, and farm-nonfarm linkages. Minimizing diversity within a cluster allows analysis of a specific economic force or public policy change on counties with specific characteristics. This delineation offers a starting point for assessing regional differences in the effects of alternative public policies on the farm sector. Material from the report was adapted for a poster display at this year's AAEA meeting in Manhattan, Kansas.

Dennis Brown contributed to a chapter in a book dealing with the impacts of the North American Free Trade Agreement (NAFTA) on the U.S. economy. The chapter, "U.S. Food Processing Issues in the NAFTA", examines the effects of the agreement on employment in key food processing industries.

Dennis Brown will also have an article published in the September 1991 issue of *Farmline*. The article, "Red Meat Packing Industry on the Move", examines the changing regional and structural shifts in the red meat processing industry during the 1980's. It was reported that while the industry, as a whole, lost employment, certain nonmetro

counties experienced employment gains. The largest employment increases occurred in a number of nonmetro counties in the Great Plains region, primarily in Nebraska, Kansas, and Texas.

Agricultural Labor Section

Speakers Focus on Farm Labor Issues

During August, the Agricultural Labor Section hosted several guest speakers to help identify critical farm labor issues and provide insights into future research directions.

Al French, USDA's Coordinator for Agricultural Labor Affairs, discussed potential legislative action in Congress which could have important implications for farm employers and their workers. Rick Mines of USDL's Office of the Assistant Secretary for Policy talked about problems of inadequate farm labor data and presented recent findings from USDL's National Agricultural Workers Survey. Elizabeth Whitley of the American Farm Bureau Federation provided an industry perspective on farm labor problems relating to pesticide exposure, inadequate housing, and field sanitation compliance under OSHA.

Future speakers will include Diane Mull of the Association of Farmworker Opportunity Programs, and Lewell Gunter of the Department of Agricultural Economics, University of Georgia.

Publications

A Staff Report by **Jim Duffield** was released in May called "Will Immigration Reform Affect the Economic Competitiveness of Labor-Intensive Crops?" This report identifies U.S. producers most likely to be exposed to more foreign competition if immigration reform increases U.S. labor costs. Import market share data indicated that U.S. producers dominated the consumer market for most fruit and vegetables over the past decade. However, five commodities--frozen broccoli, frozen cauliflower, fresh asparagus, fresh tomatoes, and fresh grapes--experience stiff competition from non-U.S. producers. Producers of these commodities are probably most vulnerable if competition intensifies, since foreign producers are already making inroads into these markets.

"Hired and Contract Labor in U.S. Agriculture, 1987: A Regional Assessment of Structure" (AER 648) by **Victor Oliveira** was published in June. The report examines labor use, as measured by expenditures for hired and contract labor, by the type, size, and geographic location of the

farm. Farmers spent almost \$13 billion on hired and contract labor in 1987, accounting for about 12 percent of total U.S. farm production expenses. The largest users of paid labor on a per-farm basis were fruit and tree nut, vegetable, and horticultural specialty farms. Labor accounted for over a third of all production expenses on these types of farms, which are among the least mechanized and require large amounts of seasonal labor. Labor was also concentrated on larger farms where the labor needs exceed those provided by the farm family. California accounted for almost a quarter (\$3 billion) of total labor expenses in the United States. Fresno County, CA, was the leading county in the Nation for farm labor expenses, having spent \$358 million on labor in 1987.

Papers Presented & Meetings Attended

Leslie Whitener attended the annual meetings of the Rural Sociological Society in Columbus, Ohio in August. Leslie presented a paper, co-authored with Timothy Parker, entitled, "Off-Farm Employment Opportunities for Farmers: A Labor Market Area Analysis." Their research examines the labor force competition (in terms of age and education) and labor market conditions (i.e. high unemployment, slow employment and earnings growth) facing farmers as they seek either supplemental or alternative off-farm employment opportunities in their local labor market areas. The paper will be included as a book chapter in *Inequalities in Labor Market Areas*, edited by Joachim Singelmann and Forrest A. Deseran, to be published in 1992.

Tom Carlin, Jim Duffield, and Leslie Whitener attended the National Agricultural Statistical Service's (NASS) Farm Labor Training Workshop held in Houston, Texas in June. NASS conducts a quarterly (in some states, monthly) survey of farms to collect information on hired, family, and agricultural service components of the farm labor force. The workshop is designed to help NASS State officials train enumerators for farm labor data collection. Leslie Whitener participated in the workshop program and discussed the analysis and use of farm labor statistics. In her presentation, Leslie evaluated several sources of agricultural labor data and focused on the joint NASS-ERS responsibilities for estimating the need for seasonal agricultural labor required by the Immigration Reform and Control Act of 1986.

Personnel

Jennifer Johnson has been employed this summer as a computer assistant in the Agricultural Labor Section. Jen

has assisted **Jim Duffield** in developing historical Lotus files on the numbers and wages of agricultural workers and has worked with **Leslie Whitener** to develop data files and graphic presentations of farm labor data related to the Immigration Reform and Control Act. A recent graduate of Thomas Jefferson High School for Science and Technology, Jen will attend the College of William and Mary in the fall.

Farm Structure Section

Family Farm Report Sent To Congress

The 14th annual report on the status of the family farm was submitted to Congress in July. The major theme of this report, prepared by **Donn Reimund** and **Fred Gale**, was to evaluate changes in the farm sector since the first family farm report was submitted to Congress. Change in the U.S. farming sector over the 1970's and 1980's has featured:

- A slowing rate of decline in farm numbers and slowing increase in farm size.
- A continuing decline in the number and proportion of farms with sales of \$10,000 to \$99,999, but a constant proportion of smaller farms and an increasing proportion and number of larger farms. These changes in the distribution of farms among sales classes were observed with both nominal and constant dollar measures, although the magnitude of the changes was smaller when measured in constant dollars.
- A moderate increase in the proportion of family held corporate farms and a constant proportion of farms operated as sole proprietorships. Most corporate farms are family held corporations. The proportion of farms and production accounted for by non-family corporations remained unchanged over the period.

If these trends continue, future shifts in the farm sector will continue to be less dramatic than during the 1950's and 1960's.

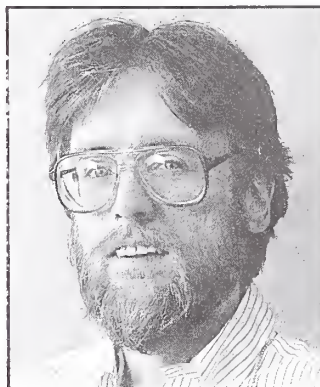
Short-term economic events during the 1974-78 period played a small, but important role in shaping the farm sector. In the 1970's, good times in farming stabilized farm numbers; in fact, small increases were recorded in some years as the entry of new farmers increased in response to favorable economic conditions. Many of the new entrants were young farmers born during the baby boom years of the

1950's. The rate of decline accelerated during the 1980's but the decline was at lower rates than experienced during the 1950's and 1960's. The decline in farm numbers during the 1980's appears to be mostly due to reduced entry into farming rather than increased farm exits.

A significant change in the farm sector during 1974-78 was the substantial increase in off-farm work by farm operators. As a result, farmers overall, and particularly those with smaller operations, are less dependent on income from farming and have greater opportunity for allocating labor between farm and nonfarm jobs than in the past. Part-time farming is a permanent and growing part of U.S. agriculture.

Personnel

Fred Gale recently returned to ERS after a year's leave during which he taught at Shandong University in the People's Republic of China. Fred taught Intermediate Microeconomics and Macroeconomics, Finance, and a Graduate Seminar to undergraduate and graduate students of the Management Science Department (all taught in English). The students and young faculty were all very eager to learn about American life and culture, as well as "Western" Economics. **Michael**



Fred Gale

Jackson, Sylvester Stallone, and Milton Friedman are well-known and admired.

Living in China can do wonders to bolster one's appreciation for a free market economy. The living conditions for Fred and his family were poor, but far better than those of the Chinese, who earn the equivalent of about \$30 a month and live in apartments of usually two rooms per family, have no hot water, and often no heat. Fred's year in China was difficult, but eye-opening and worthwhile for all the new friends and experiences acquired.

ARED People

Jim McGlone is ERS Coordinator for the Combined Federal Campaign

Jim McGlone has been named 1991 USDA Combined Federal Campaign Agency Coordinator for ERS. This year's theme is "Your Help is Their Hope." He feels this



Jim McGlone

job will be a challenge because in this recession year the contributions of the CFC to charitable organizations are going to be more important than ever. So Jim asks, please give generously. Let's make ERS the lead agency in the USDA this year.

Jim is an Economist with the Finance and Rural Development branch's Finance and Tax section.

He has been with ERS since July 1989. Prior to joining ERS he taught monetary theory and policy at Northern Illinois University for four years. Since coming to ERS he has been doing research on the demand side of the rural non-farm business credit market. This work has focused on the availability of credit to rural businessmen and the effects of Federal credit assistance programs on rural development.

In addition to his research Jim has recently joined the editorial board of *Rural Development Perspectives*. He reminds you that *RDP* is an important outlet for research in rural development issues and urges you to keep it in mind when thinking of possible publication venues.

Annette D. Dargan **National Economy and History Branch**



Annette D. Dargan

Annette D. Dargan began her tour with USDA as a Statistical Assistant in the Foreign Development and Trade Division in December, 1967, during which she received an outstanding service award for her work on Exports of Government-financed Programs.

In September 1974, she was reassigned under the Upward Mobility Program to

Economic Assistant with the Inputs and Finance Branch of the National Economy Division. During this stay she co-authored a publication with David Torgerson and John Duncan entitled "Energy and U.S. Agriculture: State and National Fuel Use Tables, 1978, 1979, 1980 and 1981." She also co-authored a Staff Report with Mohinder Gill on "Estimated Capacity of U.S. Ethanol Plants" as well as

contributing historical fertilizer data to the annual "Fertilizer Situation" publication.

In addition, she was detailed to the Agriculture Credit Branch of the Office of Management and Budget in 1982 to work on the Agriculture Study Program for which she was edited survey forms, then ran a computer program to verify the validity and accuracy of survey data on farm borrowers and finally contacted FmHA county offices for missing data.

Currently she is a Statistical Assistant/Data Transcriber with the Macroeconomics Section of the National Economy and History Branch. She has received several cash awards for outstanding assistance to the professional staff with research, situation and outlook and staff activities. She is a native of Washington, D.C. where she attended Miner Teacher's College majoring in elementary education. She currently resides in Lanham, MD.

She also attended the USDA Graduate School taking courses in Principles of Economics I, II and III as well as computer programming and basics of supervision.

She is active in her church, serving as Deaconess Board Vice-President, Sunday School and Vacation Bible Teacher General Guild President and Missionary Correspondence Secretary.

She has one daughter who is a Program Specialist with the USDA, one son who is a US Postal letter-carrier and two grandsons. The real joy of her life is her two grandsons, Warren and Tawan, whom she loves dearly and with whom she usually spends her weekends.

Jack Runyan **Farm and Rural Economy Branch**

Jack Runyan came to ARED in 1985. Since joining ERS, Jack has worked exclusively in the Agricultural Labor Section. During the two years prior to 1985 he was assistant and acting director of the Office of Agricultural Labor Affairs, Agricultural Marketing Service (AMS), USDA. When the functions of this office were divided between ERS and the office of the Deputy Secretary, Jack came to ERS. Between 1970 and 1983 Jack was leader of wholesale food distribution research in AMS



Jack Runyan
and ARS, USDA.

Jack was raised on a dairy farm near Springfield, Ohio. He attended Wilmington College (Ohio), where he earned a B.S. in Economics and Business, and the University of Maryland, where he earned both a M.S. and Ph.D. in Agricultural Economics, Maryland. They have three daughters -- a Michigan State graduate living near Chicago, a Virginia Tech senior, and a high school senior. Jack and Penny are volunteer crisis counselors for the Howard County Sexual Assault Center, a presenting couple for Presbyterian Marriage Encounter, and active in church. In addition Jack is member of the faculty of the University of Maryland University College.

Dave Banker

Farm Sector Financial Analysis Branch

Dave Banker joined ERS in 1977 as an economist in the Dairy Program Area. In 1980, shortly after one of ERS's



Dave Banker

more memorable reorganizations he transferred to the Food and Agricultural Policy Branch. In 1984 Dave left ERS for a two year stint as a reasonably well paid consultant at EEA (Energy and Environmental Analysis). Since returning to ERS in 1986, Dave has worked in the Farm Sector Financial Analysis Branch. Most of Dave's current work

involves the Farm Costs and Returns Survey.

Dave grew up in Binghamton, New York. After completing a Bachelor's degree at Clarkson College (a small engineering school in northern New York), he began a masters program in economics at the State University of New York (SUNY) at Binghamton. The receipt of an Army draft induction notice during his first semester at SUNY caused Dave to alter his plans temporarily and enlist in the Air Force. Dave completed a master's degree in Economics from South Dakota State University while serving as Missile Launch Officer at Ellsworth Air Force Base in Rapid City. In 1977, just prior to joining ERS, Dave completed a Ph.D. in Agricultural Economics from Purdue University.

Dave's leisure activities include volunteer work for the Waterford Foundation, occasional cycling, and reading (mysteries and some science fiction).

EDITORS' NOTES

Thanks to everyone who helped me with the Fall issue of the newsletter. I would like to thank Felice Marlor for preparing the newsletter for my final revisions. Special thanks to Dan Milkove for technical assistance, Tom Hady and Paul Flaim, Jr. for picture taking, Susan Yanero for help with the design, and Sara Mazie for proofreading. Just a reminder Martha Frederick will be the new editor for the ARED Newsletter, she can be reached at 219-0538 or Room 340.

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